

# The Journal

OF THE

## Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

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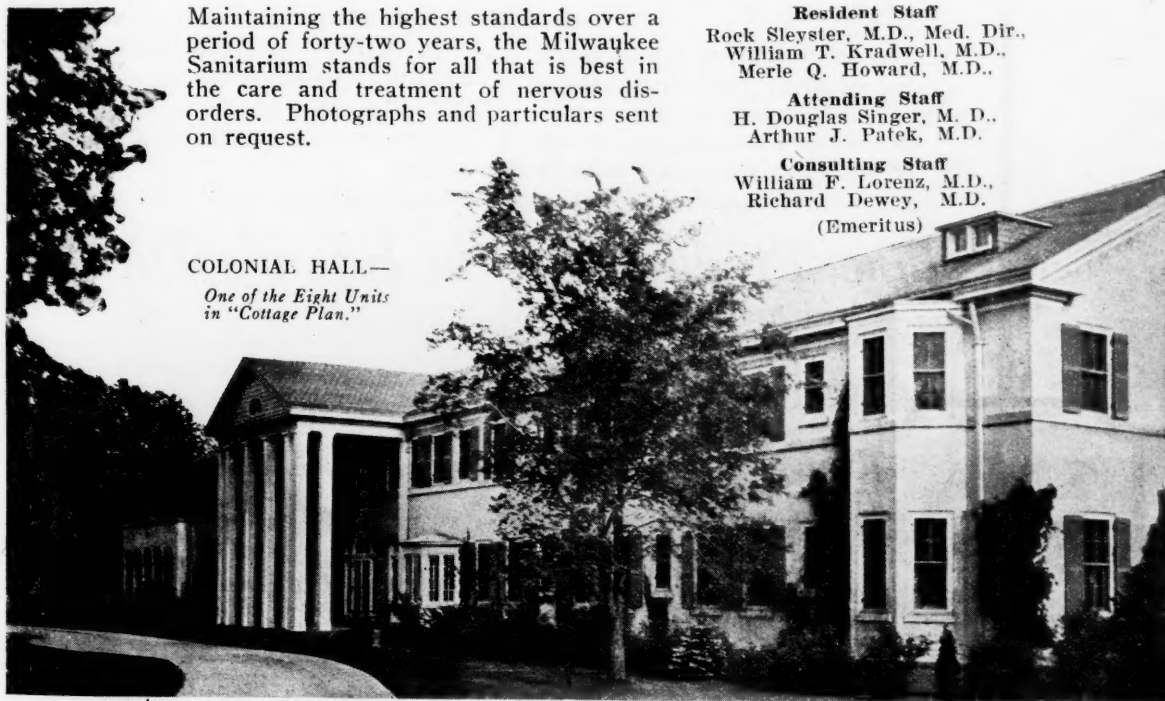
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### Original Articles

## Addresses Delivered at the Dedication Ceremony University Hospital, Ann Arbor, Nov. 19th, 1925

EDITOR'S NOTE: *We are privileged to publish and so impart to our members the following addresses delivered by invited guests at the dedication of the University Hospital. In this issue we are publishing the addresses delivered on the second evening of the ceremonies. The occasion was an epoch-making one for the University and the medical men of Michigan. As such it is fitting that this permanent record be made in our archives.*

### THE UNIVERSITY HOSPITAL

H. A. HAYNES, M. D.

ANN ARBOR, MICH.

The early days of the autumn of this year saw the finishing touches on the new University Hospital.

The building of this has occupied several years—the delays in construction have been due to many causes, the chief of which was the distraction and general upset incident to the Great War.

Important as we deemed this addition to our state institution and much as we regretted the frequent interruptions, no forward looking person had more than passing regret, for the decision that carried the conscience of America into an unsought and unwished for conflict, was so lofty in sentiment as to commend it to all mankind, and it was like the heart of this great state to set aside even the caring of her own sick and needy to rally to the support and help share the greater burden of sorrows of her cousins across the sea.

But here at last this magnificent structure stands, not indeed a pile of architectural splendor, nor a monument in glorification of the subjugation of a people, nor to commemorate any personal triumph, but rather as a testimonial that the great heart of the people of Michigan has accepted not as a high sounding phrase but as a central and abiding philosophy of life the belief that they are their brother's keeper.

The hospital today is a vitally important institution, deeply rooted in the family and civic life of the American people. Originally designed only for the care of the sick, it is becoming more and more a community health center, influencing as no other agency, the well being of the public. The recognition of the importance of adequate hospital service, both in cities and rural communities, is ample and logical reason for present advancement.

The rapid development of the hospital filed within the past few years will undoubtedly continue over a considerable period. The hospital facilities of the country, particularly in outlying regions, must be greatly increased in order to meet the standards of hospital service. The magnitude of the hospital field, expressed in terms of daily population and expenditure, is a surprise even to those closely connected and intimately familiar with hospital service in this country.

Over 1,250,000 people must be housed, fed, and cared for each day involving an expenditure in excess of \$3,000,000 each working day or over \$1,000,000,000 annually. This year the new construction and equipment program represents an expenditure of over \$300,000,000.

There are in service in the United States and its possessions about 8,000 hospitals and sanatoriums. It is interesting to note that as recently as 1873 there were only 149 hospitals in this country. The increase since that time has been 4.661 per cent in the



number, and 2,162 per cent increase in the bed capacity and a population increase of but 174 per cent.

There are in Michigan 273 hospitals and allied institutions representing a bed capacity of 30,551—206 hospitals are for acute service, 22,737 beds or 1—161 of the population. Michigan occupies the 21st place among the states in providing hospital service for its people.

Hospital authorities are practically agreed that in order to meet the demands for hospital service today there should be a maximum ratio of one active bed to every 150 of population, depending, of course, on local conditions. The University Hospital, including both active and con-service, will provide about 1,100 beds or a ratio of 1—3,300 of the population of Michigan.

The hospitals are educational centers with branches all over the country. In these schools more young women are studying the profession of nursing than are enrolled in all our universities and colleges. That these influences are not futile there is abundant evidence. In support of this it is only necessary to mention that largely through the aid of hospital and allied activities the average length of life has been increased twenty-one years during the generation just past, and without a doubt a similar period will be added in the next fifty years.

That the hospital has a double function, keeping well people well, and restoring the sick to health are among the reasons why the hospital idea has been universally accepted by the American people. Restoring the sick to health, while originally the only function of the hospital, is more and more being supplemented by the service of keeping well people well, and all over the country hospitals are taking active leadership in health educational work.

Now what is the function of this great institution? Broadly, it is operated in the service of the people of Michigan. And how does it function? The people of this state and country need doctors and nurses to care for them in their sickness and sorrow. This hospital is so equipped as to afford every opportunity for the adequate training of doctors and nurses in order that we may supply that demand—and not only does it help to train doctors to send out for service in all parts of the country, but it provides for their return from time to time so as to keep them in touch with the more recent advances in medicine and surgery to the end that even the most isolated community and the humblest citizen may have the privilege of the largest and best that science has to offer.

In addition to this it helps care for the sick. Many communities are still without hospital facilities—only about half of the counties of this country are provided with hospitals—many doctors are handicapped by lack of equipment and the facilities necessary to diagnose difficult conditions. To both of these calls we are prepared to give help, and yet with all the wonderful advancement that medical science has made the sad fact remains that the causes of many diseases are still unknown and many still remain incurable. So that it seems fitting that with the opportunities afforded by this great organization we should undertake the development of research—should set aside certain time and equipment for the investigation of those problems the causes of which are still unknown, with the hope and prayer that our children and our children's children may be spared much in the way of sickness and suffering that has come to so many of us.

Should we forget the patient after he has left the hospital? We fail to get full value of this expenditure unless we follow the patient after his discharge, not only for the purpose of conserving his health, increasing his intelligence in health matters, and preventing recurrent illnesses, but also for the purpose of getting and co-relating worth while statistical records on the results of our methods of treatment. It certainly is a distinct advantage to the staff of the hospital to maintain a complete record of the final results of the patients' treatment. Should we not know how the broken down human machine fared after the repair in the hospital and how long it remains repaired?

Follow up methods and periodic examinations of their machinery or products are now an established practice in commercial institutions and manufacturing plants. This is done to forestall unnecessary expense, accidents, and sometimes loss of life. All automobile owners know of the monthly inspections conducted by all the automobile concerns. Why should not we, in a similar manner, conduct periodical examinations of the human machines that are being repaired daily at our plant at such an enormous expense?

The desire to help—the spirit of service has found expression in so many ways that those of us engaged in the practical work have been tremendously heartened. There is scarcely a community the country over that does not have some great hearted people banded together in an attempt to add to the welfare and happiness of hospital patients. In this community the Kings Daughters and many other organizations have been a very great help.



And so, my friends, let us think of this great hospital as a magnificent institution set aside for the service of the sick and suffering, for the advancement of learning and a monument to the intelligence and the heart of the people of Michigan.

## THE EDUCATIONAL FUNCTION OF A HOSPITAL

JAMES B. HERRICK, M. D.

CHICAGO, ILL.

I speak to the text that no hospital fulfills its highest function unless it stresses the feature of education. A hospital is a place where something more should be done than merely care for the sick. It is a place in which present knowledge should be imparted and new knowledge sought.

That I may not start in with your minds prejudiced against me because you think I am overlooking the patient may I state that the central figure in every hospital is, or should be, the patient. Whatever use is made of the hospital as a means of education it should be self-understood that whenever the sick man enters it he has a right to expect and demand the most skilled treatment its staff can offer. We believe that the best treatment will be in the hospital that clearly recognizes its educational function. But if the patient be utilized for the instruction of nurses, undergraduate or graduate medical students, or in the working out of some scientific problem, there must be assurance that he is not put to unnecessary expense or robbed of his feeling of self-respect, that his life is not endangered or his health impaired thereby. We may use him as "material," to employ the word that unfortunately has become fixed in our medical vernacular, but not as we use a whetstone bridge, a burette, a test-tube, a guinea-pig or a rabbit. We assert that it is our right and duty to experiment with inanimate apparatus, and—when we are humane—with the lower animate bodies, even though the test-tube break or the rabbit die. But a human being is neither a test-tube nor a rabbit. We may study his disease, even experimentally, but we must treat him as a fellowman.

Who are to be educated by the hospital?

1. The Attending Staff—The attending physician or surgeon is appointed because of his knowledge, it is to be hoped also because of his wisdom—many doctors are learned but not wise—because of his experience, his ability as an executive organizer. But unless he is too old he is still a learner. His experience ripens and his judgment matures in the wards, the op-

erating room, or perhaps the deadhouse as he critically studies not occasional cases of disease but studies them by scores or hundreds. The surgeon who has operated on 500 cases of goitre is, other things being equal, better fitted to advise young physicians, medical students and patients themselves as to the advantages, risks and manner of operative treatment. He has been educated by the hospital, he is in turn an educator. And is not the patient a gainer? Though the individual patient may never see the head surgeon, that surgeon's knowledge and experience are the possession by tradition of the entire hospital. They filter through to the lowliest assistant and medical student. What he has learned be it technic, therapy or new ideas as to etiology is a possession of the hospital.

2. The Resident Staff—From the residents the specialists are to be developed. For one, five, ten years these men live in the hospital. The most ordinary man among them must learn something by absorption. But by care in their selection they are to begin with, a superior lot. They study, they observe and assist their seniors and their colleagues. They must teach and by so doing no one knows how inadequate or ill-sorted is his knowledge until he is forced to impart it to students and to answer their searching inquiries. They must investigate and do intensive work along new and special lines. They must shoulder responsibilities. They are becoming experts. To use again an illustration from surgery: These men can easily and readily be taught technic, how to operate. It is much harder for them to learn when to operate, harder still when not to operate. The greatest fault in our present day surgery is not poor technic, though there are many poor technicians. The greatest fault is the lack of knowledge of the causes of disease, the attendant pathologic condition wrought by disease, its natural untreated course, the risks of operation, the possibilities and probabilities of improvement or cure. Some time, it is to be hoped, it will be legally impossible for the surgeon to go out and do a major operation unless he has had this previous long, intensive training in the hospital.

And it would not be difficult to show that in a similar way the treatment of many serious ailments in internal medicine and in the specialties should be entrusted only to those with this preliminary hospital training.

The patient is the beneficiary!

3. The Interne is really a senior student. He is now in the ward in intimate daily contact with the patient. He is putting into practice in the laboratory manner what he

has learned from books, from his theoretical and other courses. He learns how to examine and to manage patients, how to record his findings, to analyze them, to think. He is learning method as well as fact. He learns by his own mistakes and those of others. He may be surprised to find that his professors occasionally make mistakes, sometimes more than occasionally. He learns that diagnosis is not by intuition but by use of gray matter. He sees the importance of a carefully elicited history. He finds out that even instruments of precision are not always precise and laboratory methods are not always infallible. I need not dwell upon the value of an internship.

The public must be made to realize that if the young graduate does not gain his practical experience in a hospital under the guidance of older heads, and in an atmosphere redolent to traditional medical knowledge handed down from one generation of internes to another, and from one group of attending men to another—and this traditional knowledge is one of the most valuable assets of a hospital—if he does not get his training in this safe-guarded manner before he is a licensed practitioner, he is forced to get it in his private practice on your child or on mine and with no counseling voice of a senior to keep him from sins of omission or commission.

The marvel is that so many men with utter lack of hospital training are able to go out and do so well—i. e., do so little harm. Native shrewdness, earnest endeavor, tact, ability to learn quickly from others and from their own mistakes, enable them to succeed in a wonderful manner. How many sad, even fatal, blunders are made through lack of proper practical training no one can tell—it is best not to tell. Even the celebrated Dr. San Grado wished Gil Blas to go about with him for a few days on his rounds of bleeding and drenching his patients with water before the said Gil Blas was to be permitted to practice as a representative of San Grado.

But I am talking of an internship in a good hospital. In many hospitals, some small, some large, some in the small towns and some in the large cities, the intern does little more than give an anesthetic, dress and take the blame for the pus cases, and occasionally examine the urine or sputum. There are no histories, or none worthy the name, no laboratory tests, no thorough examination of a patient. The intern gains a certain amount of self-confidence; often an unwarranted amount which is largely absorbed from the staff,—though there is seldom any appreciable loss at the source of supply,—he learns not to faint at the sight

of blood, learns the dose of a good many drugs, some of which he might well forget, and he learns that an easy, a lazy substitute for thinking is to do an exploratory laparotomy. Such training is superficial, incomplete and in many respects pernicious.

From a good hospital, and it is a pleasure to state that hospitals have been rapidly improving of late, these internes go out well trained to be general practitioners and again the patients and the general public are the gainers.

4. The Medical Student—The real activating force, the catalytic agents in the hospital is the medical student in the ward. He learns, of course. He hears the heart murmur and studies it at leisure. He palpates the distended gall-bladder, sees it at operation or in a fatal case at the autopsy, he learns to do the necessary clinical laboratory work, to record findings, to think and read. But in addition, he puts new life into the ward. Internes brace up and do their work better. They dislike having a green medical student find them in an error. The resident re-examines and looks up the literature so as to be prepared tomorrow for that annoying medical student who today asked the awkward pointed question. The attending physician is very careful about his diagnosis. He doesn't like to have his case of pernicious anemia shown up as a cancer of the stomach and to see the medical students nudge each other as the true condition is revealed. Supervised ward classes for medical students should be in every hospital for the good of the students, who are to be our future doctors, the attending and resident staffs and the patients. "Why", said a trustee of a large hospital in Chicago, "do the poor patients of our religious faith who can get free treatment in our wards go to the other hospital and pay a good rate for a bed?" "Because", answered one of his own staff, "that hospital is connected with a medical school, the patients are shown to students, by whom they are examined and studied thoroughly, they like it, they know they are better treated." In one of our large hospitals where students were not admitted to the wards an attending man was hurrying down the ward to look at the "interesting case," the one he was to show in the large clinic. It was the "interesting cases" only to which he paid much attention. As he went by bed after bed not noticing their occupants an Irish patient remarked to his neighbor. "Well, I suppose I ought to be a hell of a lot better. The professor has just walked by." Had students been in the ward his sarcastic wit would have had to seek other subjects for play.

5. The Nurses—I do not know whether

you consider nursing a trade or a profession or a manifestation of an altruistic emotionalism. I think it is all three. But whatever its origin, in some form or other it has come to stay. I am not discussing the question as to whether our nurses should have a two or three years course or should even be given a longer course and granted a college or university degree. I am not discussing the question of whether many of our schools are turning out too highly trained product, a supernurse, or whether there may not be a place for one less highly trained in a shorter course—an assistant nurse, a high grade practical nurse so to speak. These are all pertinent questions but need not be discussed here. The point I wish to make is that the hospital has an opportunity and duty to educate these young women. (May I ask, parenthetically, why not young men, why should women have the monopoly? Are there not certain branches of nursing that could more appropriately and as efficiently be cared for by men if properly trained?) To practice, nurses must have the training. To run a modern hospital we must have their help and co-operation. Of course as is the case with doctors, even nurses have their human failing. There are some poor ones. Sometimes, perhaps, it is the fault of the training. To a graduate nurse I said: "You may stop the digitalis, I fear it is upsetting the stomach of our patient." "Oh," piped up the angel-faced and well intentioned attractive little graduate nurse:—"I stopped that three days ago. I saw it was not helping the patient and besides the poor man didn't like the taste." Well, her powers of observation may have been keener than mine. But there was something wrong about her, she was not well-qualified by nature to be a nurse and she lacked the proper training. She had not been taught to obey and to serve. She was unconsciously acting as commanding officer.

6. Social Service Workers—The connecting link between the patient and the home is the social service worker. She it is who knows the havoc wrought in the family by illness—havoc physical, economic, moral. She knows that the illness means something more than a damage to the heart, the loss of an eye or the partial wrecking of a once keen intellect. It means reduced income, more cramped living quarters, a lower social status, sacrifice of higher schooling for the children, compulsory wage-work for the wife. Nay, it may mean more than this, may mean a face to face encounter with starvation, the public charity agency, the wreck of all hopes for a life of comfort or even decency, the collapse of the family

morale. It is her duty so far as possible to see that preventable injustice be not done by hospital or physician to one who is suffering—perhaps through no fault of his own—because of a physical breakdown. She tries to secure adjustment or readjustment to new conditions. She makes an economic survey. She follows the patient to his home—the so-called follow-up system—and sees whether the after-treatment can be or is carried out. Ignorance, poverty, scanty or poorly understood directions given by a doctor may make the hospital treatment of a disease a failure unless the social service worker or a visiting nurse follow up and see that the after-care is granted the patient. Many a failure in the case of an infant is to be attributed to the fact that when the babe leaves the hospital the details as to feeding are not attend to, through ignorance or indifference or lack of means. The social worker guards against such failures. And the end results of many an illness are not known and many valuable lessons are lost unless this department follows up. The hospital, then, is a training school for social workers and they in turn make more efficient the work of the physician. Here again the patient is the beneficiary.

There is an opportunity in a university hospital such as the new one just opened, for departments other than the medical to help and to profit. The undergraduate and graduate students of sociology should be allowed to assist, to observe and study in the wards and in the out-patient department. The hospital may well be utilized as a laboratory for training and for original investigative work in this subject, and perhaps in economics as well. Poverty, illness, trade relationships, public health, heredity, public and private charity, these and many other questions may be investigated by undergraduates or by graduates with advantage to the hospital, the patient and the public.

7. The Patient—We commonly think of the hospital patient simply as one who is treated for his illness. We forget that he is or may be educated by the hospital. Many a patient has had in a well-conducted hospital his first lessons in obedience—he is obliged to do as he is told by his doctor and his nurse. In cleanliness—care of the teeth, bathing, etc. In dietetics—regularity of meals, kinds of food. Consideration for others—he can't whistle or smoke in the ward. Courtesy, gentleness—he learns the soothe and comfort of a kind word and considerate handling of a painful part. A month's stay in a good hospital has started many a rough-neck boy or hoydenish girl on a new path with the amenities of life as ideals rather than the asperities.



I once invited a self-centered complaining hospital patient, a woman, to go with me on my rounds through the hospital. I purposely showed her all the worst cases of my own and I borrowed from my colleagues. She saw all the paralysis, dropsy, deformity, extreme anemia, emaciation, pain, difficult breathing that I could find available. I made few comments but saw to it that the harrowing features of all these cases were presented to her. She was a keen, discerning woman. She said, "Doctor, I believe you did this on purpose. But whether you did or not I have learned a lesson. I have very little to complain of, my suffering is as nothing. I will try to overlook it." And she did. From that day she was a changed woman.

Medicine is not yet an exact science. Perhaps it can never be at least in the sense in which astronomy or physics or mathematics are exact. But a stay in a hospital by an observant patient will often wean him from his penchant for some of the many healing cults that are so rampant today as they always have been. He sees the fever and pain disappear and recovery rapidly follow the draining of the deep-seated abscess but with no study of Abrams electronic reactions. The emaciated diabetic already passing into coma is rescued from impending death by a few hypodermic injections and by a diet accurately estimated by formula and by scales but with no adjustment of displaced vertebrae. The cyanotic, dropsical patient fighting for breath is given a few doses of medicine, made to keep quiet and to eat specified food and in a few days is relieved of his distressing symptoms though he may read with pleasure the writings of Mencken or Schopenhauer rather than those of Mrs. Eddy. He sees close observation, careful physical examination, chemical and instrumental tests that are made with no pretense at the mysterious or non-understandable and he is unconsciously weaned from the cult, whose main attraction is its air of mystery and its appeal, with promise, to hope, the last of nature's gifts to leave Pandora's box.

The hospital may and should do much to educate patients as to ways of right living and right thinking.

8. Were there time I might refer specifically to two other features. I have mentioned them incidentally. Physicians will understand, lay people may not fully grasp their significance. I refer to importance in every well-conducted hospital of investigating disease processes and learning of the causes of death by postmortem examinations. Even doctors often shrink from thinking of this when it concerns their dear

friends or relatives. But without such study diagnosis go astray, over self-confidence may lead to a repetition of costly errors, to loose habits of thought and practice. Nothing will serve to keep a hospital staff more in line with facts with its feet on the ground than thorough autopsy study, with relentless yet friendly and helpful mutual criticism.

And the second point. Throughout the hospital there should prevail the spirit of research. Only a small proportion of doctors are really fitted with the imagination, the industry, the good judgment to be independent investigators. Many more can investigate if they are guided by others. But without research, in the pathologic and clinical laboratories, the X-ray department, at the bedside, in the operating room, in the training school, the social service department, the hospital becomes stagnant and unproductive. To be progressive the hospital must not only teach but must add to knowledge something of the new.

9. The Public—And lastly I conceive it to be the duty of a hospital to function as a center for the education of the public in health matters. A public hospital as is yours, owes a duty to the state. It repays the state in its care of the sick, its education of students, doctors and nurses. But it may and should be a center from which there goes to the public, the lay public I mean, knowledge on medical matters. The day has passed when medical knowledge should be a book opened only to physicians. The public has a right to know and is eager to know about disease, its prevention and cure. Popular articles in the daily press and in lay magazines are widely read and sometimes understood. A hospital may help in the spread of accurate knowledge concerning medical matters, expressed so simply that its meaning is grasped by any intelligent reader. How this should be done is not here taken up. It may be by classes, by demonstrations, by bulletins, by radio, by public lectures with lantern slide or even clinical demonstrations. The good, if this is rightly done, will be great. In this way the important facts concerning many diseases can be set before the public—the venereal disease menace, diabetes, heart disease, tuberculosis, goitre, tumors, care of infants, diet, the care of teeth, eyes, etc., etc.

The hospital owes it to the public and by giving it will itself be blessed.

My apology for speaking to you on a subject that needs no elucidation before the medical faculty of the University and the staff of the hospital is that I understood my audience would be made up largely of laymen and undergraduates and those not as familiar with these questions as physicians

themselves. It is to them especially that I have spoken. To them I repeat that your splendid new hospital will fulfill its highest function if it constantly keeps to the front the education features to which I have briefly referred.

### THE UNIVERSITY HOSPITAL—ITS SOCIAL AND ECONOMIC SERVICE TO THE STATE

CHARLES P. EMMERSON, M. D.  
INDIANAPOLIS, IND.

The statement that over 35 per cent of all the young men examined for service in the World War must of necessity be eliminated because of physical disability by the first examination, and that an additional 10 per cent were rejected later as a result of examinations made in the training camps, is a staggering revelation to proud Americans. Many of the thirty-five or more of each one hundred eliminated first may already have known of their disability; but probably few of the other ten did. This is one of the mysteries of life, that so many apparently healthy persons have defects of which they are unconscious, defects which can be demonstrated by careful examination, which early are remediable, and which, if allowed to progress, may develop into conditions which later are only too evident, are serious, and sometimes even incurable. That so many of the young men were unfit for war, and therefore are unfit also for the severe crises of more normal life, should indeed attract the attention of each state. Some are conscious of their handicap but many are not, thanks to that very wide margin of safety which conceals until later life many a serious defect. Such latent troubles may be likened to the rocks at the seashore which are not visible at high tide but which at low tide, although no larger than before, project threateningly. So the youth while the tide is high may for years harbor a latent trouble, and then in some crisis of life, just when he needs depth of physical reserves, he "strikes" this and the result may be physical disaster. Or, to use another illustration, there is in Southern Indiana the so-called Lost River which as a sizable stream wells up from the earth. We can see no evidence of its source and yet we know that small streams unite under ground later to emerge as this river. So it is that many of the diseases of adult life which interrupt perhaps suddenly a period of years of apparently good health, diseases especially of the heart, joints, and kidneys, are only too often lost rivers which had their sources in the infections and diseases of childhood. In the field

of mental hygiene especially one finds such troubles, both physical and mental, which are latent yet ready to work disaster. Under the title mental troubles we include first the insane and near-insane states; also, those conditions often grouped under the names neurasthenia, psychiasthenia and hysteria, that is, states of inadequacy, which explain so many unhappy, handicapped lives; and, finally, we include also many social maladjustments, usually not recognized as abnormal, which manifest themselves in antisocial attitudes and as unfortunate urges or inhibitions. Many of these states of mind, which one would at first consider purely mental and social, have a physical element of greater or less importance which must be correctly treated if the case is successfully to be handled. The line between the mental and physical in human pathology is but an imaginary one and to get results we must treat both together; we cannot afford to neglect either. Latent diseases of the blood vessels, lungs, hearts, etc., diseases which give no characteristic symptoms other than too great fatigue, explain in no small part that lack of ambition and of initiative, and the slothfulness which leads to indigence, and these it is which lead to social parasitism and make necessary the bulk of public or private charities. Slight grades of disease may cause that "laziness," that mental depression, which prevents the normal advancement of the individual in the industrial world; and the causes of the resulting inefficiency misunderstood both by individual and by society, there arises the dissatisfaction which provides the professional labor agitator with many of his blind followers. Finally, physical weakness does not of itself directly cause criminals, for it might as well produce saints, but it often does explain the antisocial mental attitudes which do lead to crime.

These groups which we have enumerated, the physically sick, those apparently well but latently sick, the insane, the socially maladjusted, the emotionally handicapped, the criminals, the dependents, and others of antisocial nature, furnish practically all of the most difficult and expensive problems which a state must of necessity meet. To solve these may require several quite different agencies, but the elements of physical diseases are so important in their causation that they cannot wisely be ignored and they can best be studied by a state university. She has the groups of specialists necessary, and your splendid hospital is the proper laboratory for this research.

May we at this point protest that this is not a paper on so-called state medicine. It is, however, a paper on the value of medicine



to the state. We certainly do not believe that as a primary duty the state should undertake the care of the sick, not even of the indigent sick, for they deserve much better care than that furnished by "the lowest and best bidder." But when the professional care of the sick, whether pauper or millionaire, is one item in a program of the education of doctors and nurses, or in incident to the solution of difficult physical, mental, social, industrial, and criminal problems, then a state is ready to erect a miracle like the hospital we now dedicate, and should begrudge no expense in its maintenance, knowing full well that however great this may seem it is in fact an economy.

University hospitals are often misunderstood since they belong to the twentieth century while, unfortunately, the great philanthropic hospitals of today proudly express the social philosophy and conform to the philanthropic ideals of several centuries ago. Your university hospital envisages present day problems and organizes her forces in an efficient manner to meet present day responsibilities. The others do not. To illustrate this we would invite you to consider that popular catch phrase heard so often when hospitals are under discussion, "worthy poor." But who are the "worthy poor"? But one answer is possible, "The very poor". And why are the worthy poor so very poor? Quite four hundred years ago, when the ideas of hospitalization so prevalent even today crystallized to their present form, society consisted of at least two distinct classes: a small aristocracy who ruled society by virtue of its so-called divine right, and the great mass of persons who, whatever their several abilities, were in large measure doomed to follow in the industrial and social footsteps of their fathers. Few succeeded in changing their social status no matter how worthy they might be or how unworthy the aristocracy which ruled them. These "common people" were poor, as a rule very, very poor; the aristocracy saw to that. Some of the more charitable of the ruling class, feeling more or less keenly their responsibility for the masses apparently entrusted to them, created for them (and entirely at the expense of the common people) the hospitals, schools and other public institutions which today cities and states support. In a society like ours, however, in this country which provides abundant opportunities for even the humblest and which encourages each to climb as high as he can, in these days of employers' liability laws, of savings banks and of insurance and benefit societies the able-bodied destitute man becomes an object of suspicion. Why is he so poor? Is he lazy, shiftless or is he feeble-minded?

Why has his wife or child been left without insurance or savings? The state is interested to know since the answer may lead to a necessary reform. Many of course are very poor and very worthy but their number is progressively becoming smaller. My friend's servant asked of him, one recent Monday, an advance on his wages of \$25. When reminded that only two days before he had been paid \$35 he confessed that he had lost it gambling. My friend said, "Should you not save? What if you were to become sick?" The houseman replied, "If I were sick and had a little money, I would have to employ cheap doctors; but if I haven't a cent then I can go to the City Hospital and even you, the most expensive man in town, will operate on me for nothing." There is indeed something wrong in that system of philanthropy which supports hospitals which welcome the shiftless nere-do-well and organize for his care the best doctors of the city, but which employ a special detective force to prevent his more thrifty brother who happens to own a little store from imposing on their "charity," leaving the latter to the mercies of those men whom he can afford to pay. Who then is worthy of free medical care? Society now gives a different answer and, strange to say, the change of opinion expressed by this answer has not dried up the stream of philanthropy but rather has increased it. The answer is that all good citizens are worthy, but they are worthy in proportion, not to their uselessness, but to their usefulness. The state realizes that the health of her citizens is her greatest wealth. She desires as citizens for times of peace as well as for war men and women strong in body and moral in mind. To obtain these she must provide means for the early diagnosis and the prevention of latent troubles; this means better mental hygiene; and especially it means better family doctors, for it is they who first see or do not see these latent dangers. Physical and mental excellence in much greater measure than now is quite possible, since in its early stages nearly every medical problem can be solved, and most serious medical conditions are so because they have been neglected.

The first step in the solution of this great state problem is the education and training of more skillful doctors and better nurses. Another step is more research work on these great problems by your scientists. Of course this will not be done all in this one hospital, but the example of this one will improve the quality of work of every doctor in the state. The actual good done here will be trifling compared with the indirect good which this hospital will accomplish. Treat one patient



well, and you have treated one patient well; but teach one student how to treat that patient well, and you have helped every one of his future patients. Nurse one patient well and you nurse one patient well; but teach one pupil nurse how to do it and you have helped all of her future patients. For that reason all done in this hospital should be of the highest possible quality. Then the service here will remain an ideal towards which each of your graduates later will struggle. Such is the unique influence of a training and research hospital.

This hospital, however, will do more than teach; it offers an opportunity to develop and to test efficiency. The other faculties of this university may conceive it their highest function to impart knowledge, but we of the medical are confident that our duty is not alone to impart knowledge, but is also to help the student to translate this knowledge into power, and not only into power, but into power for good. In the streets of our cities one meets trucks filled with new automobile parts. Each part may be perfect and yet not one is as yet assembled for work. Some may never be. How different is such freight from a machine every part of which is at work! So it is that too often a student leaves a school with his mind filled with facts as yet unassembled. It is in the ward, not in the class room, that the student begins to assemble and to test out at least a few of his many acquired mental medical mechanisms. In the class room and laboratory we show him how to do this; in the ward he practices until he does it well. I may "know how" to play the piano but I know that if I tried you would not listen long for I have never practiced. Perhaps if I were to practice it might develop that I so lacked musical sense that I never could play well and therefore should stop trying. At the ball game I may yell myself hoarse coaching and criticizing the team; I may know a great deal about the game; but did I try actually to play ball I would present a sorry spectacle on the field. So it is that a university may be satisfied to graduate men rich in information about many subjects, but she should not give the medical graduate his diploma before he shall have proven his efficiency in using at least a little of this knowledge sufficiently well to justify our faith that he will develop into a good doctor. Yes, before he gets his diploma his knowledge should be in process of translation into power and this power should be power for good. Granting that the student "knows his medicine" and already has proven his capacity for developing efficiency, what will he do with it? Give, in a technical school, two boys with approximately equal abilities

in mechanics the same good training and the one may become an inventor and the other a safebreaker; and the better the training, the more dangerous the safebreaker. Give two boys with approximately the same artistic ability the same training in art, and the one may become an artist and the other a counterfeiter, and the better the training the more dangerous the counterfeiter. Similarly we of the medical school have frequently observed that accurate information concerning the dangers of the vices does not of itself lead to virtue; it may, but it sometimes makes its possessor a shrewder, safer, and more dangerous rascal. So it may be that even the most brilliant student in his class should not be allowed to graduate provided he has given evidence of evil; and if so, the more brilliant he is, the more dangerous he is likely to become. Leave out of the medical graduate's program the element of unselfish service and what kind of a doctor will he be? Dr. William Osler, back in the 90's, expressed this to the students entering the Johns Hopkins Medical School as follows: "If", said he, "your hope is to enter a lucrative profession, please go home, but if you have come here in the spirit in which the missionary goes to his foreign field, confident that in medicine you best can use your talents in the service of your fellowman, then we welcome you." And yet I wonder if the citizens of Michigan would support you if the medical faculty were you to say to a student, "You may be the honor man of your class but since we doubt the quality of your moral fiber no diploma shall you receive?" I am not sure. This may seem a very idealistic point of view, but quality of service both technical and moral is the crucial test of medical education, and such a test can be applied only in a great teaching hospital like yours.

It is a hospital like this also in which the student's intellectual honesty can be developed. Over twenty years ago the medical students of one school were given the opportunity to volunteer for social work among their patients in order that they might better appreciate what is involved in the diagnosis and treatment of even an apparently simple medical case and might realize how much harder it is to cure a case than to give the correct conventional therapy. They soon found that while one man might need medicine to cure the physical complaint which had brought him to the hospital, and while another with similar symptoms might need an operation, that a third man with similar symptoms might entirely fail to get well unless in addition to the medicine or operation there was also affected for him some reorganization of his home, his work, his

worries, etc. That is, if we really wish to cure a patient we must meet all important etiological elements of his case. Our patients come to a hospital because of apparently purely physical troubles. They seldom know what the matter with them is, but they have faith that we can find out; and they also have faith that having found out we will do our best to help them. If to do this requires the co-operation of druggist, surgeon, or dietician, we always have done our best; if of a social worker also, perhaps we have tried; but if it requires the co-operation also of clergyman, rabbi, or priest, what then? In other words, should our graduates be encouraged to make the mental reservation that their therapy is to be either medical or surgical, and that if any other agency is necessary for results that they have the right to ignore it? The state supports a medical school not in order that our graduates may receive medical diplomas, but in order that through their aid its citizens may get well and may keep well. It is by our fruits that the state shall know us. She reads our results not in terms of conventional treatments but in terms of health. Society is no longer interested in the descriptions of successful operations if they are recorded in obituary notices. No clinic can afford to be satisfied with partial success since such are in corresponding degree partial failures, and partial failures too often later develop into complete ones. One great physician in 1897 said of his clinic, "I wonder if more than three out of ten of these patients can get here the help you need? To help the other seven we are not yet the organization." He referred to an organization which could handle their domestic and industrial needs. By such department we do not refer to social service workers who, as free lances, wander through the wards choosing their own problems and working them out in their own way; certainly we could not discourage such work, on the contrary we would that many charitable organizations might maintain workers in the hospitals; we refer to those social workers who belong to a well organized diagnostic and therapeutic team, well trained for team play. In this team are physicians, surgeons, laboratory men, nurses, dieticians and others, and the signals for the various lines of effort are given only by the man who assumes the professional responsibility for the care of the patients. Thanks to these so-called environmental workers we are able to assume a quite different attitude toward our patients than we did twenty-five years ago. We remember so well the blacksmith with aortic insufficiency who when he left after his fourth admission said pathetically, "I am

going back to the forge, doctor, for that is all I know how to do. I have a wife and children and must work there every day I can until I drop dead," which he did after his next admission. Now, thanks to an environmental worker, such men find better jobs and are spared longer to support their families; and the hospital bed he occupied is available for other needy persons. We remember the poor Italian woman with mitral stenosis who was admitted to that one clinic twenty-six times. We remember also that that clinic was rather proud of that record. Now it would probably be ashamed of it, for no hospital should allow the values represented by those many admissions to be so carelessly squandered. A good social worker might have kept that woman at home longer and in better health, and, therefore, that hospital bed ready for several other patients. We remember well a little baby with digestive trouble whose first admission cost the hospital \$42.50. His mother brought him back in about three months with exactly the same symptoms, and this admission cost the hospital over \$50. A few months later his mother brought that child back for the third time in much the same condition. Then those hospital trustees instructed that staff to educate that mother so the benefit of treatment might not be so completely lost. That marked a new era in hospital management. Were the hospital storekeeper to allow good meat to spoil for lack of refrigeration; were the cooks to use food wastefully; were carelessness proven in the pay roll; how the critics of the hospital would cry for reform! But what of the preventable waste of days and weeks of careful diagnosis and treatment when social care would prevent much of this loss?

It is only in wards of a University hospital that the various departments of a university can unite in "team play" for the study of state problems. Few of even the seemingly physical cases can be adequately studied by one department only: the co-operation of five or six may be necessary. Here the department of sociology can find a valuable laboratory; here the department of economics can find its problems; here the department of psychology can be of great service. In other words, an entire university can focus its attention on many of the most important of the state's problems. Do not misunderstand us, we are not talking about a "clinic" group. That, while splendid in its way, is a quite different organization. It is only in a university that several highly organized independent departments can converge their efforts towards the solution of the same problems, each viewing it in the light of a much broader ex-

perience, and each seeing in it the possibilities of much wider service.

Finally, a hospital like this has a message for every home in the state. Here the sick may get proper care. Here the wife and mother may learn better how to meet her problems. Here the housewife should see cooking, laundry, dusting, sweeping or even washing the floors done ideally. Here the medical student and nurse see diagnosis and treatment at its best, and carry these images with them as ideals in their future practice, and to this hospital they can return in order "to keep in tune" with advancing medicine. Here state officials can find solutions for many of the state's most perplexing cares, disease, dependency, even crime. It may seem an extravagant statement, but where can the State of Michigan get as much actual aid in building up healthy, normally minded, law-abiding citizens as in this hospital, which, like a great lens, focuses the attention of practically all of the departments of her great university on so many serious state problems?

### SYNERGISTIC ANALGESIA DURING LABOR\*

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#### HISTORY

Seventy-seven years ago, Roux and Pirogoff originated the idea of administering ether via the rectum. They used undiluted liquid ether. But Magendie pointed out the dangers attendant upon introducing ether itself in this manner and recommended the use of ether vapor. Pressure was obtained from warming the ether container. Eighty-one cases of surgical anesthesia were reported, with only two deaths. Unfortunately the data recorded concerning the death of these two cases were very meagre. The profession did not take up this idea and it fell into the discard until 1884. In that year, Yocum of Copenhagen and Moliere of Lyons, almost simultaneously reported the employment of a hand bellows to force the vapor into the rectum. They soon went back to the idea previously advanced, however, and placed their ether container into the colon by means of a rubber tube. In the same year, Wier, Bull and others reported this method to be unsatisfactory and cited cases having bloody stools and excessive rectal irritation. The inability to measure the amount of ether entering the colon

or to control the stages of anesthesia was also determined to be a decided disadvantage.

Practically no further advance was made until 1902, when Cunningham and Lahey proposed using an air and ether mixture. This proved much more successful. Numerous reports were all kindly disposed toward the method. At first no return flow for gas was provided other than inserting a finger beside the tube whenever necessary. Later a return tube was added to the equipment which could be opened or closed by the anesthetist.

In 1910 Sutton devised a rather complicated apparatus for the use of ether and oxygen. This was tried on a series of 140 cases at the Roosevelt hospital with very satisfactory results. One can imagine, however, the vigilance and the more or less extensive apparatus required to administer ether and oxygen in this manner. Couple this with the fact that there is a broad knowledge of physiological factors with which the anesthetist must be conversant and one can understand why this idea was more or less discarded for the less complicated inhalation method.

In 1913, Gwathmey reported on the use of ether in oil. This was after painstaking research by Baskerville of New York, on the evaporation rate of ether from various oils. It was demonstrated that practically any oil formed a union, essentially of molecule to molecule; that this union, for all practical purposes, was not dissolved excepting through the process of evaporation; that because of these physical factors, the ether dosage could be accurately determined; and that the total required dose could be administered quite rapidly with no risk of deepening the stage of anesthesia to the danger point. This last was because the evaporation of ether from oil quickly assumes an even steady rate. An even plane of anesthesia per rectum was thus made possible and by a simple method.

In 1923, ten years after first being used for general surgery, Thaler and Hubel first employed the method in over 100 obstetrical cases with very satisfactory results. Out of that number there was only one failure and no deaths. All babies were unaffected. In cases where labor tended to be retarded, they administered quinine or pituitary extract.

The addition of magnesium sulphate to the armamentarium of the anesthetist was due to a discovery by Meltzer in 1905, while experimenting for other purposes. After finding that two drops of a 5 per cent solution of magnesium sulphate injected intracerebrally into a rabbit produced a state of com-

\*A report of forty-one cases from the Obstetric and Gynecologic Clinic of Harper Hospital.



plete relaxation and anesthesia lasting a number of hours, he and his colleagues conducted further investigations along this line. As a result, they established the fact that magnesium sulphate has decided and practical anesthetic properties. Complete anesthesia in man was demonstrated by the subcutaneous injection of magnesium sulphate in a 25 per cent solution.

It was not until 1920 that Gwathmey employed the principle of synergism to produce analgesia and anesthesia via the colonic route. The end result of these experiments has culminated in the method of synergistic anesthesia first employed by Gwathmey during labor and various applications of the idea as described herein.

#### PHYSIOLOGICAL FACTORS

Synergism might be defined as that result caused by two or more drugs mutually increasing the effect of one another to a point in excess of the sum of their individual pharmacological actions. We shall make no attempt to explain synergism. Regarding it very little is known other than that we can observe its action. Familiar examples of it are morphine and scopolamine, morphine and nitrous oxide and morphine and ether. We are principally concerned herein with the results of synergistic action produced by the combined use of magnesium sulphate and ether.

Meltzer stated in 1913 that by giving a small amount of ether, insufficient to cause anesthesia and then giving an insufficient amount of magnesium sulphate intramuscularly, a profound anesthetic could be produced and maintained for several hours.

Meltzer and Auer conducted extensive experiments which proved that magnesium sulphate in dilute solutions injected intravenously would produce a gradual decrease in the respiratory rate. Continuance of administration would gradually slow the rate of respiration which after a wild, brief struggle, would terminate in complete rest. Rapid injection of concentrated solution intravenously would produce very prompt termination of respiration, and in most cases, without the excitement usually accompanying asphyxia. When applied directly to a nerve, magnesium sulphate acts as a local anesthetic. When injected intramuscularly, it can produce complete muscular relaxation. Complete anesthesia can be attained by magnesium sulphate alone. It never produces excitement. The only deleterious action demonstrated was the inhibitory action of excessive doses on the respiratory center. Due to its local anesthetic action, the injections are painless. Meltzer and Auer

further demonstrated after their series of experiments with animals, that the injection of any calcium salt neutralizes almost at once, any effect obtained by the subcutaneous injection of magnesium sulphate. He states that, "Calcium efficiently antagonizes the abnormal activity of its three inorganic associates in the animal body, Mg, K, and Na, be the activity an over inhibition or an over excitation."

Regarding any danger of infection from hypodermic injections of sterile magnesium sulphate, a series of over one thousand cases have been reported to have received magnesium sulphate intramuscularly without causing a single slough. None were observed in the series of cases herein cited.

A. V. S. Lambert of New York should be credited with demonstrating the synergistic action of magnesium sulphate and morphine. He first demonstrated the prolonged effect of morphine when given with magnesium sulphate. The action seems, perhaps, best explained by stating that magnesium sulphate acts in a way somewhat similar to a mordant in dyeing fabrics. It seems to lock the morphine in closer connection with the body tissues, increasing its analgesic properties and permitting a much slower elimination of it from the system. Lambert should also be credited with first demonstrating the synergistic action of magnesium sulphate with nitrous oxide and oxygen. It is conceded that nitrous oxide is more dangerous when administered without a preliminary dose of morphine. Since the administration of magnesium sulphate with morphine extends the analgesic action of the latter past the time period where it can produce a depressing action on the respiratory center of the new born infant, the use of this combination with nitrous oxide and oxygen could be made a valuable adjunct in obstetrical cases. Although the writer has been unsuccessful in conclusively demonstrating the fact in the cases cited below, nevertheless, he is of the opinion that proper injections of magnesium sulphate alone can be made to produce a satisfactory synergism with nitrous oxide and oxygen whereby nitrous oxide can be more safely administered to patients during child birth. There would be no struggling and practically no nausea or vomiting.

After proper preliminary preparation with morphine and magnesium sulphate, there is seldom the slightest discomfort, even in the earliest stage of administration of the retention oil-ether enema. Within three minutes after beginning administration, the ether has reached the cecum. From the moment of entry it has begun the process of being heated to body temperature. With the eleva-

tion of temperature, ether vapor begins forming and the whole colonic lining acts as an absorbing surface. From the colonic capillaries, it proceeds through the portal system to the liver, thence through the right heart to the lungs. Ether can be detected on the breath usually within five minutes from the beginning of administration, although but a very small amount is liberated into the bronchial tree. The fact that the ether breathed comes from within, already warmed and moistened, explains the very obvious absence of irritation to the respiratory passages. The absence of irritation to the stomach and kidneys is likewise explained by the very gradual liberation of ether from the oil in the colon.

With colonic ether, the higher brain centers are the last to be affected. The first symptom is usually one of sensory paralysis. This is more noticeable in the extremities and gradually becomes general. Consciousness may or may not be lost but, if lost, it returns much earlier than somatic sensory perceptions.

#### TECHNIC

##### *Drugs Employed:*

1. Morphine sulphate.
2. Magnesium sulphate, (C.P.) sterile, 50 per cent solution in 2 c. c. ampules.
3. Gwathmey's rectal retention enema:
 

Ether .....	3iiss
Quinine hydrobromate .....	Gr.X
Alcohol .....	3ii
Olive oil .....	q.s.ad f3iv

##### *Apparatus Employed:*

1. Hypodermic syringe, 5 c. c. capacity.
2. Needle, 19 gauge, 1 1-2 inches long. One that fits the syringe.
3. Rubber catheter. A good, stiff 20-22 French. Anything larger tends to permit of too free flowing. Cut the flair off the distal end to permit the syringe to fit more perfectly.
4. Syringe of 30 c.c. to 50 c.c. capacity. One whose tip will fit the catheter.
5. Thumb screw clamp. Used to clamp the catheter or reduce its capacity of flow.
6. Vaseline.
7. Adhesive tape.

##### *Mode of Procedure:*

1. Note the progress of dilation. When the patient is admitted to the hospital, the progress of dilation is noted at once by the interne, after which, if possible—
2. A soap suds enema is given. When the primiparous cervix is four centimeters dilated, with pains coming every three to four minutes and lasting at least thirty seconds.
3. A tap water enema is given until the return flow is clear. Feces or soap suds seem to decrease the efficiency of the oil-ether enema and a mucosa coated with dejecta retards the rate of absorption. After the tap water enema has been started, not necessarily waiting for its complete return—
4. An intramuscular injection of sterile magnesium sulphate—one ampule—is given, dissolved in

which is an amount of morphine which the physician judges necessary for the case. If the patient is extra excitable and delivery is not expected for several hours, one might give grains one-fourth. If labor is estimated to be of shorter duration, grains one-sixth to one-eighth is given. If delivery is expected within two hours, the magnesium sulphate is given alone. Then, when the dilation has approached six centimeters (we are taking the primiparous cervix as an example)—

5. The patient is prepared to receive the oil-ether retention enema.

- a. The patient is placed in an extreme left Sim's position with her hips elevated on a pillow. Her left leg is practically straight and the right one semi-flexed. After impressing on her that the medicine she is about to receive is for her pain, she is told to not press down during contractions and is instructed how to take quick, short breaths instead. Do not promise her sleep or entire relief from pain.

- b. The anus is then coated within and without with vaseline, to guard against a possible stinging of the ether.

- c. A good, stiff catheter is then introduced into the anus from four to six inches and held in place by a strip of adhesive tape on the right buttock, crossing the catheter not more than an inch from the anus. If the catheter is not stiff, it can not thus be held as it will buckle during pains and be expelled.

- d. To the other end of the catheter is fitted the barrel of a 30 c.c. to 50 c.c. syringe. By cutting the standard flair from the distal end of the catheter, a more fluid tight joint is obtained.

6. Giving the retention-enema:

- a. An ounce or more of the retention enema is poured into the barrel of the syringe. If it begins flowing into the rectum too rapidly, the catheter is gradually impinged by means of a thumb screw clamp previously placed just below the syringe. The clamp is adjusted until the rate of flow is such that fifteen to twenty minutes will be consumed in administering the whole enema.

If, for any reason, the flow is not free, the syringe plunger is kept within easy reach to lend a gentle impetus. The thumb screw clamp can be closed between syringe-fulls when the plunger is used. This permits removal of the syringe from the catheter between refillings. Otherwise more or less of the enema would be expelled and lost while the plunger was being withdrawn from the barrel.

- b. When a contraction begins, a crumpled towel, preferably Turkish, is pressed firmly against the anus until the pain is gone.

- c. After all the enema is given, the catheter is left in place with the clamp closed. It is convenient to fasten the looped catheter on the right buttock with another adhesive strip, in such manner that the end of the catheter points downward, for convenience in emptying contents into a basin if necessary. While untoward incidents are hardly to be expected, it is well to leave the catheter thus in place for about a half an hour or long enough to satisfy oneself that an emptying of the bowel might not be indicated.

- d. For fifteen minutes after the administration of the enema is completed, a crumpled towel is pressed firmly against the anus during each pain. This is a prophylactic measure against ejection of any portion of the enema.

7. After care, following the oil-ether retention enema:

- a. By the time the enema has been given, the

patient is usually quiet. The room is then darkened, cotton placed in the patient's ears and as few manipulations permitted as possible.

b. If possible, it is highly advisable to make no rectal or vaginal examination for an hour after finishing the administration of the enema. It not only makes the effect less satisfactory but may cause a portion of the oil and ether to be expelled.

c. Within an hour after giving the enema, an ampule of magnesium sulphate should be given. This tends to prolong the effect of the ether. Then this is repeated as often as the physician thinks necessary to prevent restlessness. It is important to remember that the onset of restlessness must be fore-stalled by the magnesium sulphate. Once restlessness actually becomes manifest, the amounts of magnesium sulphate employed do not prevent or retard the process of reaction. It is, therefore, sometimes found advisable to administer three or four additional 2 c.c. ampules of magnesium sulphate, usually thirty minutes apart, to keep the patient as well relaxed between pains as she should be.

d. With the patient in a state of analgesia, intelligent watching is necessary.

(1) It should be borne in mind that this system of treatment does not necessarily induce sleep. The patient may be noisy. A pain memory may be carried over from consciousness, causing her to complain bitterly of pain of which she has no recollection the following day.

(2) It must not be forgotten that the patient is in a state of analgesia. The observer might be deceived into thinking she had the full possession of her faculties. Therefore it is imperative that orders be left to watch the bladder for distension. Also, since the analgesia often robs the observer of the usual warning signs and sounds as the head approaches the perineum, it is wise to impress on one the necessity of guarding against advancement unawares.

8. The oil-ether enema can be repeated when indicated, if three or more hours have elapsed.

9. It is to the baby's advantage to give as little inhalation anesthesia as possible on the delivery table.

#### CLINICAL OBSERVATIONS AND CASE REPORTS

The collection of clinical data on such a subject, when dealing almost exclusively with private patients, means working under more or less of a constant handicap. Each physician has his own ideas on therapeutics which differ somewhat from his colleagues. At one time the patient is seen by the attending physician and prescribed for. Again, the patient is seen by the resident physician and prescribed for. While always striving to use each physician's therapeutics on his own cases and consulting with each one insofar as is possible, yet, when granted permission to try out a new technique, there are bound to be differences in procedure, which explains in large measure the variance in treatment observed in a large number of cases.

We wish to thank the members of the staff whose co-operation helped make these observations possible; also the firm of

Parke-Davis & Co., who supplied the ampules of magnesium sulphate.

Most of the cases have had the combined treatment, namely, preparation, preliminary hypodermic, and oil-ether enema in the order named, with or without supplementary ampules. A few cases have had the morphine and magnesium sulphate without the enema, while some have had just the enema and magnesium sulphate.

The clinical observations have been included, for the most part, in the case reports, that seeming to be the most logical place for them. At no time have any deleterious results been observed in the mother and only one where a question of harm to the child might be raised. That was in Case No. 24, where an unusually large amount of inhalation ether was used and the child at birth needed a moderate amount of resuscitation.

One has been unable to discover anything but benefit accruing to the patient from this technique. No unusual changes in the urine or blood pressure have been found. One might consider the possibility of hypodermic abscesses from the intramuscular injections. There have been none observed in these cases nor could any be found in the literature. One has administered magnesium sulphate as part of a technique for surgical anesthesia in over a thousand cases without a single abscess. The question of causing an irritated anus and rectum has been raised but in no case did the anal irritation last over ten minutes. If ample time is allowed after the preliminary hypodermic there is no marked complaining.

All patients have been watched carefully for deleterious results from the oil-ether enemata. Although there is small probability of ever finding any, yet it is thought best to leave the rectal catheter clamped and insitu to facilitate a rapid removal of the enema if necessary.

Since the use of this technique is now becoming more general, an extra safeguard is now being supplied by having physostigmin and sterile calcium chloride always on an emergency tray. The necessity of ever being obliged to use them is doubted. Calcium ions, given intravenously, are proven to completely reverse the effects of the ions of magnesium. This antagonism works quickly and effectively. Physostigmin acts to overcome the toxic effects of the magnesium ion in three ways: principally by stimulating the respiratory center; also by antagonizing the effect of the magnesium upon the nerve endings of the respiratory muscles; and, further, by stimulating the nerve endings of the pneumogastric within the lungs. The only situations conceivable where either drug might be needed are



where too much inhalation anesthesia might be given. This might occur had the anesthetist not been informed of the employment of the synergists. The giving of the calcium chloride to the mother would probably never be called for. If the infant's respirations were retarded, a small dose of physostigmin might be indicated.

Out of one thousand and fourteen cases in the past year, there have been none where the synergists would have been contraindicated. The method seems especially indicated in the case of the elderly primipara with a tough cervix and with prospects of a long, hard labor.

The following cases had the combined treatment:

Case No. 1—No. 12213. September 9th, 1924. Patient para i; Age 24, American. Normal weight about 135 lbs. Normal pregnancy. Position, L.O.A. Total hours of labor was twenty-five. When she had labored four and three-quarters hours, she was given morphine grains one-sixth in an ampule of magnesium sulphate. She was prepared for an oil-ether enema which was given after six hours of labor when four centimeters dilated. Approximately two ounces of the enema were expelled a half hour after having been given and another ounce of fluid was expelled an hour later. It is impossible to state how much of the retention enema was expelled. She worked well with her pains and dozed off between them. This continued for four to five hours. The pains then gradually became more distressing again. After twenty-two hours of labor, dilation was complete. A normal, seven pounds, fourteen-ounce baby was delivered by low forceps. Nitrous oxide was required much as usual. The patient later said that, while she was conscious of suffering during pain, she obtained rest and sleep between times. She said further that while the enema felt cold and smarted a little about the anus for a few minutes, that it was nothing when compared to the relief she obtained.

Conclusions—The oil-ether enema was given a trifle too early. She should have been nearer six centimeters when the enema was given. Also supplementary ampules of magnesium sulphate, given about one hour after the enema would have prolonged the effect.

Case 2—No. 14793. November 15th, 1924. Patient para i; age 21, American. Normal weight about 145 pounds. Normal pregnancy. Position O.L.P. Total hours of labor was fifty-three. Membranes ruptured at onset of labor. After laboring eleven hours, she was found to have but four centimeters dilation. Because of considerable fatigue, morphine grains a sixth and scopolamine grains of two-hundredths were given. She slept for three and a half hours. The strength of the contractions was lessened very considerably for four and a half hours. At the twenty-fourth hour of labor she was dilated but five and a half centimeters. The pains were of fair intensity. She was very despondent and fearful. An oil-ether retention enema was given without a proper cleansing of the bowels and without a preliminary hypodermic of morphine and magnesium sulphate. There was some complaint of smarting about the anus for the first ten minutes of the administration. Forty-five minutes after the enema was given she received an ampule of magnesium sulphate and another an hour after that. She was permitted to become markedly restless before these were given and they did not produce the relaxation intended. At the thirty-fourth hour of labor she had become quite exhausted. Dilation still stood at five and a half centimeters. Morphine grains a sixth and

scopolamine grains a two hundred and fiftieth were given. Contractions lessened for four hours. At the fortieth hour, the dilation was unchanged. Morphine grains an eighth was given. When the patient had been forty-four hours in labor, the dilation still stood at five and a half centimeters. An inertia had developed. She was then given morphine one sixth grain in an ampule of magnesium sulphate. This was followed in thirty minutes by an oil-ether enema. The patient was in a drowsy state of analgesia before the enema had all been taken. Five hours later she had been allowed to become almost too restless to be held in analgesia by further giving of magnesium sulphate. However, it was attempted by giving two ampules, one five hours after the enema and one a half hour later. This was without success. Yet, for the time she was under the synergists, she dilated almost to completion, there being but a small rim of cervix left. She was left to labor four hours more, after the effect of the synergists had worn off and then taken to the case room. What remaining rim there was was easily pushed back past the head. Delivery was then done by manual rotation anteriorly and applying forceps. The baby weighed seven pounds and ten ounces and cried readily. The patient later volunteered that the rectal medication "helped" her and expressed gratitude for having been given it.

Conclusions—There would have been no unpleasant anal smarting had the enema been preceded by the usual morphine and magnesium hypodermic. In this case, morphine one-fourth grain in an ampule of magnesium sulphate was indicated at the twenty-fourth hour of labor, followed one or two hours later by the oil-ether enema. Then another magnesium sulphate ampule should have been given one to two hours later and every half hour if there was the slightest sign of a lessening in the amount of relaxation between pains, up to five or six ampules. The cervix would probably have dilated more quickly and analgesia would have been prolonged. She would thus have avoided the unpleasant experience of laboring through the last portion of the first stage without something to relieve the distress.

Case 3—No. 15315. November 28th, 1924. Patient para i; age 34. American. Normal weight about 165. Normal pregnancy. Position L.O.A. Total hours of definite labor was twenty-one. Pains were unusually strong. After eight hours of labor, with a dilation of seven centimeters, morphine one-eighth grain and scopolamine one two hundredth grain were given. This gave a moderate amount of relief for two and a half hours during which time she made practically no advancement. After twelve and three-quarters hours of labor, with dilation the same, an oil-ether enema was given without the preliminary hypodermic. The patient was extremely restless and complained bitterly of each pain, even after a decided analgesia was apparent to observers. After two hours she became more quiet and worked quietly during pains. She had received four ampules of magnesium sulphate in the two and a half hours following the enema. These were given at half hour intervals because of her lack of complete relaxation between pains. This gave relaxation although the contractions were about as strong as ever. Dilation was complete after nineteen and a half hours of labor. As the head did not advance readily after complete dilation, patient was transferred to the case room. Pituitrin XV minims did not produce any further advancement. A low forceps application was then made and a difficult delivery of a nine pounds fifteen-ounce, healthy baby was accomplished after a wide episiotomy.

Because of the extreme caustic in some of the patients complaints as well as because other observers were inclined to discount the relief obtained, the patient was questioned on the second post partum day. She expressed surprise at her complaints and knew

nothing of them. She said she had but a hazy idea of having hard pains and was exceedingly grateful for the relief afforded.

**Conclusions**—This illustrates the prolongation of analgesia by the proper administration of supplementary magnesium sulphate. No dependence can be placed on patients' statements. Pain-memories seem carried over with them into a state of analgesia at times. The best judge of the effect is the relaxation obtained between pains.

**Case 4**—No. 916. January 22nd, 1925. Patient para i; age 22. Russian Jewess. Normal weight about 160. Norman pregnancy. Position R.O.A. Total hours of labor was ten. After laboring moderately hard for seven and a half hours, morphine one-sixth grain in an ampule of magnesium sulphate was given. This was followed in an hour with an oil-ether enema. Dilatation was six centimeters. The patient dozed off for about an hour, being unconscious of contractions which continued practically the same. The os was completely dilated an hour after the oil-ether enema was given. She was scarcely conscious of her removal to the case room. The anesthetist had administered a little more nitrous oxide and oxygen than was necessary before being cautioned about the magnesium sulphate. As the head was already on the perineum, low forceps were applied while she was relaxed. A lusty, eight pounds two-ounce, normal baby was delivered.

**Conclusions**—The results here approach the ideal. Without the inhalation anesthesia, the patient would probably have delivered spontaneously.

**Case 5**—No. 1160. January 28th, 1925. Patient para i; age 28. Russian Jewess. Normal weight about 140. Normal pregnancy. Position L.O.A. Total hours of labor was thirty-nine and a half. Morphine sulphate one-fourth grain was given by hypodermic when she had labored fifteen and a half hours. She was then dilated two centimeters. This quieted her distress for an hour and forty minutes. Her contractions became exceptionally painful. At thirty-four and a half hours, she was six and a half centimeters dilated and exhausted. Morphine one-sixth grain in an ampule of magnesium sulphate was given, followed in thirty minutes by an oil-ether enema. Two hours after the enema, dilatation was complete. When transferred to the case room, the pains were strong, every three to four minutes and lasting a minute. The anesthetist had given nitrous oxide and oxygen before learning that Gwathmey's technique had been employed. This helped to make the patient too comfortable to try and utilize her pains. As the head was resting on the perineum, a low forceps application was made. She was delivered of a normal seven pounds, three-ounce baby.

**Conclusions**—An earlier administration of the synergists would probably have shortened the length of labor. With less inhalation anesthesia and perhaps, with the aid of a very few minims of pituitrin, she might have delivered herself spontaneously.

**Case 6**—No. 1611. February 7th, 1925. Patient para i; age 21. Russian Jewess. Normal weight about 170. Normal pregnancy. Position L.O.A. Total hours of labor was forty and a half. At the twenty-sixth hour of labor she was but four and a half centimeters dilated. Pains had been only moderately severe. Morphine one sixth grain and scopolamine one hundred and fiftieth grain were given. This eased her distress and lessened the strength of the contractions for about four hours. After laboring for thirty-six hours, nine hours after having had the morphine and scopolamine,—the os was five and a half centimeters dilated. It had gained about one centimeter since administering the hypodermic. At this time morphine one-sixth grain in an ampule of magnesium sulphate was given. Fifty minutes later an oil-ether enema was given. A very noticeable re-

lief from distress was obtained. There was a moderate decrease in the strength of the contractions for about an hour. Three hours after administering the morphine and magnesium sulphate, the dilatation was complete. The patient was transferred to the case room forty minutes before delivery. The head was not quite on the perineum but, due to the length of labor and being completely dilated, a forceps application was made. An eight pounds nine-ounce baby was born in good condition. A moderate amount of nitrous oxide, oxygen and ether was administered during the delivery.

**Conclusions**—The morphine, magnesium sulphate and ether did not slow up the contractions as did the morphine and scopolamine. Had the Gwathmey technique been started earlier, the total hours of labor might have been reduced.

**Case 7**—No. 2145. February 19th, 1925. Patient para i; age 34. American. Normal weight about 170. Normal pregnancy. Position L.O.A. Total labor was twelve hours. After nine hours of labor, the dilatation was five centimeters. The initial hypodermic of morphine one-sixth grain in an ampule of magnesium sulphate was then given. The oil-ether enema was given a half hour later at which time the os was dilated five and a half centimeters. The patient relapsed into unconsciousness after each pain but roused to work with each contraction. She could not comprehend instructions in the case room, so when the head was well on the perineum, pituitrin minims three and then minims five were given to help push the head over the perineum. Delivery of a seven pounds, eleven-ounce normal baby was effected three and a half hours after the oil-ether enema was given. The patient does not remember having been in the case room.

**Conclusions**—The patient was an elderly primipara. Her chances for a much longer labor were good. The rapidity with which the first stage was terminated and the freedom from pain and shock was very gratifying. It is very probable that without the aid of the synergists, labor would have been much more prolonged with a good chance that inertia would have developed.

**Case 8**—No. 2311. February 22nd, 1925. Patient para i; age 28. Russian Jewess. Normal weight about 150. Normal pregnancy. Position L.O.A. Total hours of labor was twenty-six and three-quarters. After having irregular pains for twelve hours, they became regular and progressively harder. Ten and three-quarters hours later the patient was very noisy and hysterical. The dilatation then was about three centimeters. Morphine sulphate one-fourth grain in an ampule of magnesium sulphate was then given. The labor continued. There was a lessened state of apprehension. One and a half hours after the hypodermic, the dilatation was five and a half centimeters. The retention enema was then given. The patient remained conscious. Two hours following the enema the contractions were every two minutes—good and firm. Asked at this time if she was having pain, she said no. Dilatation was then practically complete. The head came onto the perineum very soon thereafter. A moderate amount of nitrous oxide and oxygen was then given, after transferring her to the case room. Immediate, spontaneous birth followed an episiotomy. The baby cried promptly. The mother dozed for an hour after return to bed.

**Conclusions**—The results here were very satisfactory. The worst pain she remembers was before the preliminary hypodermic. The patient was rapidly becoming unmanageable before the synergists were administered. Afterwards she had no fear and relaxed completely between pains.

**Case 9**—No. 2590. March 1st, 1925. Patient para i; age 27, American. Normal weight about 125. Normal pregnancy. Position R.O.A. Total hours of



labor was twenty-six. After nineteen hours of labor there was no dilation and the patient was becoming hysterical. The process of effacement seemed excessively painful. After twenty-two hours of hard labor, dilatation had reached four and a half centimeters. Morphine one-eighth grain in an ampule of magnesium sulphate was given at that time followed by a cleansing enema and the oil-ether per rectum. The patient seemed totally unable to co-operate in giving the Gwathmey's technique. As a result, the bowels were not satisfactorily cleansed and a portion of the oil and ether was expelled. The patient did not at any time get complete relaxation. After an hour her pains strengthened for a short time and she dilated from four and a half centimeters to completion in two and a half hours under the synergists. With complete dilatation, inertia again returned sufficiently to indicate a low forceps operation. A lusty seven pounds, thirteen and a half-ounce, normal baby was delivered. The usual amount of nitrous oxide and oxygen was administered for the operation. From the standpoint of the observer, the results were rather disappointing. However, the patient later volunteered a great amount of gratitude for the relief obtained.

Conclusions—Inertia was well advanced when the initial hypodermic was given. The amount of morphine should have been a sixth. She should also have had about two additional ampules of magnesium sulphate an hour and a one and one-half hours respectively after the retention enema. The results then would have been more satisfactory. A forceps operation might also have been avoided.

Case 10—No. 3334. March 16th, 1925. Patient para i; age 24, American. Normal weight about 125. Normal pregnancy. Position R.O.A. Total hours of labor was twelve. After laboring for about four hours, she was nearly four centimeters dilated. Morphine one-sixth grain in an ampule of magnesium sulphate was given. Fifty minutes later the dilatation was almost five centimeters. The oil-ether enema was then given. One hour after the retention enema, the patient received a second ampule of magnesium sulphate and then three more at half hour intervals. She became slightly excited within two hours after the enema, laughing and crying alternately and complaining of feeling silly. Her pains continued but caused no apparent distress. Dilatation was complete seven hours after the initial hypodermic. She delivered spontaneously one and a half hours later. The child weighed eight pounds and eight and a half ounces. It cried at once. A small amount of ether was required as the head passed over the perineum. None was necessary for the repair of a second degree laceration. The patient later stated she was "helped."

Conclusions—The ether inhaled would have been insufficient for analgesia without the synergistic action. Though the patient was conscious when transferred to the case room, the analgesia was apparent to observers.

Case 11—No. 3329. March 16th, 1925. Patient para ii; age 20, Negress. Normal weight about 130. Normal pregnancy. Position L.O.A. Total hours of labor was eight. After six hours of labor the patient was four centimeters dilated. She was then given a preliminary hypodermic of morphine one-eighth grain in an ampule of magnesium sulphate. The retention enema was given thirty minutes later. She was rather difficult to control during this administration and she expelled a small portion of enema. A towel over the face for rebreathing purposes helped to compensate for the loss per rectum. Forty minutes after the enema was given, the head was on the perineum and she was transferred to the case room. Her external conjugate was but seventeen and a half centimeters; the baby weighed nine pounds and two and a half ounces. There was some difficulty in delivering the shoulders. The child cried promptly. The

patient was exceedingly co-operative on the table and required but a few drachms of ether. She later said the most pain she had was before the medicine was given.

Conclusions—The patient was unusually apprehensive before receiving the synergists. Afterwards she gave ideal co-operation. There was no fear. Between pains she obtained complete muscular relaxation. There seemed to be a shortening of the first stage.

Case 12—No. 3335. March 17th, 1925. Patient para i; age 24, American. Normal weight about 130. Normal pregnancy. Position R.O.A. Total hours labor was eighteen. After seven hours of labor the os was four and a half centimeters dilated and morphine one-sixth grain in an ampule of magnesium sulphate was given. An hour later she was about five and a half centimeters dilated and so the oil-ether enema was administered. The enema was followed in an hour by a supplementary magnesium sulphate ampule and then two more were given at half hour intervals because of seeming restlessness between pains. Eight hours after the oil-ether enema was given, she spontaneously delivered an eight-pound, eight and a half-ounce, normal baby. Though the patient was in a state of reduced consciousness as well as in analgesia, she co-operated, while on the table, with her pains just as directed. A few drachms of ether were given as the head passed over the perineum. No ether was necessary for the repair of a second degree laceration.

Conclusion—The patient needed additional magnesium sulphate to keep her in a state of analgesia. Her relaxation between pains was very apparent. To show her vagueness of consciousness, she remembers being transferred to the case room but, though she probably received not more than six drachms of ether during delivery and none during the repair, she can remember nothing of the repair.

Case 13—No. 344. March 18, 1925. Patient para ii; age 24, Negress. Normal weight about 160. Normal pregnancy. Position L.O.A. Total hours of labor was eleven. After eight and a quarter hours of labor, morphine one-sixth grain in an ampule of magnesium sulphate was given. Dilatation was then four centimeters. An hour later the os was open five centimeters and the oil-ether enema was administered. The patient began to react to the ether ten minutes after the enema was started. She was conscious of contractions but was completely relaxed between pains. She received a supplementary ampule of magnesium sulphate a half hour after the enema was given. The head was resting on the perineum two and a quarter hours after the oil and ether had been received. A seven pounds, normal baby was delivered without any inhalation ether being used. There was no struggling; merely one outcry. The mother knew when the baby was born, asked about the sex and what time it was. A small amount of ether was used while repairing a small laceration. The repair work did not seem to cause pain but caused her to move just enough so that the operator could not be quite sure what she was going to do. The patient stated afterwards that her worst pain was before the medication was administered.

Conclusions—The time of the first stage was evidently shortened. The patient had an ideal reaction, obtaining analgesia but no loss of consciousness.

Case 14—No. 4135. April 2nd, 1925. Patient para i; age 29. Russian Jewess. Normal weight about 200. Normal Pregnancy. Position L.O.A. Total hours of labor was twelve. After seven hours, active labor began and patient became somewhat noisy. At this time the os was dilated three centimeters and a half. Two hours later it had dilated to nearly five centimeters. She was very much frightened. Morphine one-sixth grain in an ampule of magnesium sulphate was given, followed an hour later by an oil-ether



enema, when six centimeters dilated. Immediately after receiving the enema, the patient went to sleep in spite of contractions. After eleven hours of labor, dilatation was complete. She had practically slept through the last eight centimeters of dilatation. She delivered spontaneously a normal five pounds thirteen and a half-ounce baby. The patient did not realize that she had been out of her bed until about ten hours later when a nurse brought her baby to nurse.

**Conclusions**—This patient probably would not have had a long labor without the synergists. The case was very gratifying inasmuch as the picture of fright and shock was obliterated. Her incredulity was amusing when told she was a mother.

**Case 15**—No. 4281. April 5th, 1925. Patient para i; age 31. American. Normal weight about 140. Normal pregnancy. Position L.O.A. Total hours of labor was sixteen and a half. The cervix was fairly thick and unyielding. After eleven hours of labor, dilatation was a small four centimeters. Morphine one-sixth grain in an ampule of magnesium sulphate was given and an oil-ether enema begun an hour when dilatation had reached five and a half centimeters. A great deal of relief was obtained. There was perfect relaxation between pains. Two hours after the retention enema the patient was completely dilated. She was taken to the case room fifty minutes before delivery. Here, by the aid of a fourth c.c. of pituitrin an *dan episiotomy*, a normal eight pounds three-ounce baby was spontaneously delivered. A very moderate amount of nitrous oxide with oxygen was used.

**Conclusions**—The patient's labor was undoubtedly terminated much earlier than would otherwise have seemed possible. There was no consciousness of pains until just before delivery in the case room. The effect of the analgesia was prolonged by the use of supplementary ampules of magnesium sulphate one hour and two hours after the enema. Had she received three ampules instead, beginning one and a half hours after the enema and given every half hour, she probably would not have awakened to pain consciousness at all.

There were fifteen more cases having the combined treatment that were very similar in all results to those just reviewed. While included in this report, we will not review them here although their case numbers and other data will be furnished to anyone interested. The more cases to whom one gave the treatment, the more success was obtained in producing the desired state of analgesia.

The following eleven cases have had variations of the prescribed technique. We cite them because the comparisons are of educational value.

**Case 16**—No. 14312. November 6th, 1924. (On this date we had no magnesium sulphate ampules.) Patient para i; age 21. American. Normal weight about 140. Normal pregnancy. Position L.O.A. Total hours in labor was nine. At the fifth hour of labor, when dilatation was three centimeters, she was given morphine one-sixth grain. This was followed by an oil-ether enema forty-five minutes later. Patient complained of burning in the rectum during the first quarter of the administration. She then became drowsy between pains. She reacted from the enema in about two hours and an hour later she was completely dilated. Her pains then became unusually severe. She was delivered spontaneously of a normal six pounds thirteen-ounce, eight months baby.

**Conclusions**—The lack of the magnesium sulphate was noticeable in the lack of prolongation of effect. The enema needed support with magnesium sulphate.

**Case 17**—No. 818. January 20th, 1925. Patient para iii; age 31. Russian Jewess. Normal weight about 170. Normal pregnancy. Position R.O.P. To-

tal hours of labor was twenty. Both previous labors had been prolonged. The first delivery was instrumental. The second was by podalic version. Both were posterior positions also. The patient had had sodium bromide Gr. 60, and saline  $\text{Ziv}$  per rectum when dilated four centimeters. She had then been in labor fourteen hours. The effect of this wore off in about one and a half hours and she became very apprehensive. When she had labored sixteen hours, an oil-ether enema was given without any preliminary hypodermic. This was followed at once by an ampule of magnesium sulphate. At this time the os was six centimeters dilated. Two hours later dilatation was complete and she was transferred to the case room with the head practically on the perineum. Low forceps were applied and a normal six pounds, twelve-ounce baby delivered. A much less amount of ether was required than would otherwise have been necessary. The head rotated by itself. The patient stated that she got considerable rest after the enema was given.

**Conclusions**—The patient would have received more relief had morphine and magnesium sulphate been given in place of the sodium bromide.

**Case 18**—No. 1920. February 14th, 1925. Patient para i; age 25. Jewess. Normal weight about 130. Normal pregnancy. Position R.O.A. Total hours of labor was forty-three and a half. The patient was of a decidedly nervous temperament. After laboring thirty hours the os had dilated seven centimeters. There was a thin tough rim of cervix remaining. The patient exhibited signs of beginning inertia. Morphine one-eighth grain in an ampule of magnesium sulphate was given. This resulted in a return of co-operation and dilatation proceeded again. A female child was delivered spontaneously, one and a quarter hours following the hypodermic. About three drachms of ether by inhalation were necessary as the head passed over the perineum. The child cried promptly. The patient was slightly drowsy for an hour after returning to her room.

**Conclusions**—A decidedly insufficient amount of ether was inhaled to produce, by itself, a state of anesthesia, yet this patient was perfectly relaxed as the head came over the perineum. This was evidently due to the synergists.

**Case 19**—No. 1933. February 14th, 1925. Patient para i; age 23, Russian Jewess. Normal weight about 140. Normal pregnancy. Position L.O.P. Total hours of labor, twenty-five. After twenty-two hours of labor, dilation was seven centimeters and the vertex was still in a high mid pelvic position. The patient was very tired. Morphine one-fourth grain in an ampule of magnesium sulphate was administered. This gave considerable relief. Two hours later the vertex, which had rotated to the transverse, was showing no further signs of advancement. She was transferred to the case room and, by podalic version, an eight pounds, nine-ounce baby was delivered in good condition. Nitrous oxide and oxygen were successfully used.

**Conclusions**—Had this patient been given an oil-ether enema the head would probably have rotated completely and descended without the use of supplementary magnesium sulphate ampules to prolong the synergistic effect.

**Case 20**—No. 1928. February 15th, 1925. Patient para ii; age 25. Jewess. Normal weight about 140. Normal pregnancy. Position R.O.A. Total hours of labor was eighteen. After sixteen and a half hours of labor, the os was seven centimeters. She began to show signs of inertia. Morphine one eighth grain in an ampule of magnesium sulphate was given. With this the dilatation was rapidly completed. The head was on the perineum forty minutes following the medication. One and a quarter hours after the hypodermic, a seven pounds, fifteen-ounce, normal

baby was delivered spontaneously. But six to eight drachms of ether were required for the whole delivery and repair of a small second degree laceration.

**Conclusions**—The patient was frightened and exhausted. The hypodermic removed the fear and fatigue. The effect of the eighth of morphine in the magnesium sulphate was as great as one would expect from a fourth of morphine alone. And a fourth of morphine could not have been given so late with much safety. Without the magnesium sulphate, much more ether would have been necessary.

Case 21—No. 2416. February 25th, 1925. Patient para i; age 20. American. Normal weight about 150. Normal pregnancy. Position L.O.A. Total hours labor was twenty-two. The patient had a low arch. External conjugate was eighteen and a fourth centimeters. She had been given morphine one sixth grain in her sixteenth hour of labor. At this time she was four centimeters dilated. She reacted well to this for an hour but her pains then became so severe that she was unruly. Morphine, one-sixth grain in an ampule of magnesium sulphate, was then given, two hours after the first hypodermic. The os was then dilated six and a half centimeters. She was soon markedly relieved. In three hours she had become ready for the case room. A seven pounds and four ounce normal baby was spontaneously delivered. A moderate amount of nitrous oxide and oxygen was administered.

**Conclusions**—The morphine and magnesium sulphate produced a more lasting effect than the morphine alone. The cervix continued to dilate at a faster rate under the influence of the synergists.

Case 22—No. 2626. March 2nd, 1925. Patient para i; age 29. American. Normal weight about 135. Normal pregnancy, position R.O.A. Total hours of labor was twenty. Labor was very active. The cervix was fibrous and did not readily dilate. After ten hours of active labor, morphine, one-sixth grain in an ampule of magnesium sulphate, was given. Dilatation was then six and a half centimeters during pain. The dilatation was the same three hours later when morphine one-sixth grain and scopolamine one two hundredth grain were given. Pains continued every four to two minutes, quite severe till one and a half hours before delivery, when dilatation became complete. When transferred to the case room, low mid forceps were applied because of inertia. A seven-pound, eight-ounce healthy baby was delivered.

**Conclusions**—This case could have been handled much more advantageously had it not been that the husband was a professional man and had many suggestions as to what should be done. Had the initial hypodermic contained one-fourth grain of morphine and had an oil-ether enema been insisted upon, there would not have been so much opportunity for suggestions by the family and the inertia would probably have been avoided.

Case 23—No. 2749. March 4th, 1925. Patient para i; age 21. Swedish. Normal weight about 120. Normal pregnancy. Position R.O.A. Total hours of labor was thirteen. Dilatation had been a very painful process. Patient began to insist that something be done. Morphine one-sixth grain in an ampule of magnesium sulphate was administered after eleven and three-quarters hours of labor. Dilatation was then about seven centimeters. The patient relaxed between pains. Two hours after the hypodermic she was ready to be transferred to the case room, where she was spontaneously delivered of a six pounds eleven-ounce normal baby.

**Conclusion**—The speed of dilatation was aided and the patient given much comfort by the synergists.

Case 24—No. 3091. March 11th, 1925. Patient para i; age 25. American. Normal weight about 125.

Normal pregnancy. Position L.O.A. The outlet was rather narrow but the foetus was estimated to be small. Total hours of labor was twenty-six. Patient was very noisy and began to beg for relief at her seventeenth hour of labor. Morphine, one-sixth grain in an ampule of magnesium sulphate, was given. Dilatation was then six centimeters. The hypodermic only slightly dulled the pains. They were exceptionally severe and continued every three minutes as before. At the twentieth hour of labor, dilatation was seven and a half centimeters. There was further indication for relief as the contractions were exceptionally hard. The patient's discomfort was augmented by very large, prolapsing hemorrhoids. Morphine sulphate, one-fourth grain in an ampule of magnesium sulphate, was given. Satisfactory relief was obtained but the contractions did not diminish in frequency or duration. Dilatation was complete and patient ready for delivery four hours after her last administration of morphine and magnesium sulphate. Ether retardation was necessary because of some delay of the physician's arrival. The spontaneous delivery of a six-pound, eleven-ounce baby was followed by a slight tardiness on the part of the infant to breathe, necessitating artificial respiration and a few dashes of ether across the chest. Child then cried well.

**Conclusions**—This patient should have had morphine, one fourth grain at the first administration. This should have been followed by an oil-ether enema and two or three supplementary ampules. Even though the outlet was narrowed, the time of labor could have been materially shortened.

The tardiness of breathing in this case shows a possible danger to be considered in using the synergists. The anesthetist should always be informed when synergistic measures are employed. Unless they are always on the alert for these cases, it is an easy error to give more inhalation ether than is necessary. One must constantly keep in mind the fact that, in the presence of magnesium sulphate, less ether must be given. The effect of over etherizing by inhalation when magnesium sulphate is used, seems to be first noticed in the infant's respiratory rate.

Case 25—No. 3260. March 15th, 1925. Patient para iii; age 37. American. Normal weight about 160. Normal anti partum history. Hydramnios. Position L.O.P. Total labor was twenty-nine hours. The pains were very severe. She was given morphine, one-fourth grain, after eight hours of hard labor. At this time the os was three and a half centimeters dilated. Her pains were much less severe for four hours and then returned. After nineteen and three-quarters hours of labor, the os was dilated but four centimeters. There was evidence of early inertia. At this time she was given morphine, one-sixth grain in an ampule of magnesium sulphate. No appreciable effect was observed for an hour. Then the patient became nicely relaxed between pains and during contractions the signs of inertia disappeared. A supplementary ampule of magnesium sulphate was given one and a quarter hours after the first. Dilatation proceeded from four centimeters to completion in two and a half hours under the synergistic effect of the morphine and magnesium sulphate. It took seven additional hours for rotation to complete itself. Spontaneous delivery of a normal nine pounds and four-ounce child was effected twenty-five minutes after rotation.

**Conclusions**—This case was given morphine, one-fourth grain, and did nothing except rest. She was later given morphine, one-sixth grain in an ampule of magnesium sulphate, and dilated from four centimeters to completion in two and a half hours. The greater efficacy of the latter medication was most apparent to observers.



Case 26—No. 3887. March 29th, 1925. Patient para i; age 24. Danish. Normal weight about 190. Normal pregnancy. Position L.O.A. Total hours of labor was forty. The cervix was very fibrous and the perineum was very muscular. After thirty hours of good hard labor, the os persisted in remaining at six centimeters. Morphine, one fourth grain in an ampule of magnesium sulphate, was administered. She slept four and a half hours; then labored with renewed vigor. In five hours the head was on the perineum. She was delivered of an eight pounds, twelve-ounce normal baby ten hours after the administration of the morphine and magnesium sulphate.

Conclusions—This patient was exhausted from a long labor. The morphine combined with the magnesium sulphate produced a longer effect than the morphine alone. For two hours after renewal of labor she worked hard but without as acute pain-consciousness as exhibited during the first thirty hours. This patient would have reacted better to the combined hypodermic and rectal treatment.

We are of the opinion that this method of treatment, or modifications of it, will largely supplant the use of morphine and scopolamine, chloral or bromides per rectum or other medications given for the relief of pains during labor.

It is not intended that the treatment outlined above shall or should supplant entirely the use of inhalation anesthesia. In all but the more susceptible cases, inhalation anesthesia in small quantities is indicated somewhere during the second or third stage. The usefulness of this treatment lies in the fact that relief can be given during the late first and early second stages, where heretofore, inhalation anesthesia has not been found so practical.

#### SUMMARY OF CONCLUSIONS

1. The morphine, magnesium sulphate and ether work synergistically to produce analgesia during the greater part of the first and second stages of labor.
2. The method shortens the first stage of labor, especially in the case of the elderly primipara with the fibrous type of cervix.
3. In the prescribed amounts, we have not demonstrated any ill-effects from the use of the synergists.
4. In the presence of magnesium sulphate, less nitrous oxide and oxygen, or ether need be given by inhalation. If the synergists are disregarded by the anesthetist, the infants' respiratory efforts may be retarded.
5. Nitrous oxide and oxygen is a much safer anesthetic to give, provided the patient has had a preliminary hypodermic of morphine and magnesium sulphate. Even though the hypodermic was administered as long as ten hours before, the effect is usually noticeable. There is not the straining or excitement and vomiting occurs less often, even after delivery.
6. Morphine and magnesium sulphate alone produce more satisfactory results than

morphine and scopolamine. They are to be preferred because they tend to hasten dilatation faster than the morphine and scopolamine, while the amount of rest obtained seems about the same.

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#### THE DOCTOR'S LOG

WILLIAM J. STAPLETON, Jr., M. D.  
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*"Ages shall honour in their hearts enshrined  
Thee, Southwood Smith, physician of mankind  
Bringer of Air, Light, Health into the Homes  
of the Rich and Poor, of Happiness years to  
come."*

—Lehigh Hunt.

In Florence, at the ancient Piazza Donatello, is the old Protestant cemetery, its grounds beautifully shaded with cypress and rose trees. Walking along the narrow paths I saw where the lovely Elizabeth-Barret Browning rests and the simple marble with the name of Walter Savage Landor. Near by my attention was drawn to a small marble column on which the inscription quoted above was carved and on the other side were these words:

*"To the memory of Southwood Smith, physician, who through the promotion of Sanitary Reform, the principles of which he was the first to discern and through his philanthropic and literary efforts was distinguished as a Benefactor of mankind. Born at Martock, England, December 1, 1788. Died in Florence, December 10, 1861."*



Here he rests far from his home, the man who made possible modern sanitation. Thomas Southwood Smith was an interesting character. He was not only a physician but also a preacher in the Unitarian church. Even as a medical student in Edinburgh he took charge of a congregation. About 1820 he moved to London and was appointed physician to the London Fever Hospital—his experience here was shown by the publishing of his great work—a Treatise on Fevers—which at once became the leading authority on this subject. In this book he established the direct connection between the impoverishment of the poor and endemic fever. He was considered an authority and was often consulted in fever epidemics and sanitary matters by the public authorities. His reports on quarantine 1845, cholera 1850, yellow fever 1852, and on sanitary improvements 1854, were of international importance.

## FLORENCE

*"Along the banks where smiling Arno sweeps  
.....the veil of Heaven  
in half undrawn: within the pale we stand—  
dazzled and drunk with beauty."*

Byron

One hardly thinks of Florence, the art center of the world, in a medical way. The city where men like Michelangelo, Dante, Savonarola, Cellini, Galileo, Giotto, Camabue, Boccaccio, Petrarch, and all the others who made history and gave birth to the Renaissance lived, but little is said about it in a medical way. Yet it has a university, hospitals, clinics and doctors who are well known. By-the-way, it was in Florence that Florence Nightingale was born—thence her name. The difference in language makes it rather difficult for the visitor but it is always interesting to see the workshops of other people. So let us fare forth and visit the

## HOSPITAL OF THE INNOCENTS

Here in Florence is the world famous Hospital of the Innocents, or Foundling's Hospital, founded by Leonard Aretino in the year 1421. This institution is the oldest of its kind in Europe. The parapet and facade are by the great Brunelleschi. The portico is by Francesco Della Luna and is considered the most beautiful in Europe. The frescoes of the Child and Aesculapius by Poccetti and the famous terracotta "bambinos" in the front by Andres Della Robbia (1463) are master pieces. This institution is doing its work today and a sign printed in four languages tells when those qualified may visit the Hospital, see how the babes are cared for and look at the famous collection of portraits, bronzes, paintings, frescoes and other historical objects.

## SOCIETY OF MISERICORDIA

Not far away from the Foundling's Hospital is the age old Hospital of Santa Maria Nuova, built by Portani. Here one day I saw the ancient organization known as the Misericordia going about their charitable work the same as they have done for the last seven hundred years. Its objects are to see that the poor sick are taken to the Hospital and go on errands of mercy to the needy poor. This society has had a most eventful history which makes interesting reading. They wear black gowns and hoods and no one knows whether it is a prince or poor man who is doing a good act. They exemplify the saying of Jesus Christ, "As often as ye do it to one of these, my brethren, ye do it unto me." The Society was founded by a pious Florentine as a protest against the too prevalent practice of taking the Lord's name in vain.

## HOSPITAL AMERIGO VESPUCCI

At the rear of our hotel was a busy street called the Via Borgognisanti. One day I heard the noise of an ambulance and looking out of the window saw it stop at a building a short distance down the street and a patient carried in. Later I investigated and found the building was the Hospital Amerigo Vespucci, erected in 1400 on the ground formerly occupied by the old homes of the Vespucci family where the famous navigator, who gave his name to our country was born. The family gave the funds necessary for the building of the hospital and it has been in use ever since—ninety-two years before another Italian, Columbus, came to our shores.

Going in I noticed first the tablet on the wall telling about the Vespucci family. Then I climbed the great central staircase, there being no elevator, and looked about the second floor. On the front side were large wards and around the court the semi-private and private rooms. There was a simple operating room, laboratory and X-ray equipment. It is a semi-public institution with no-pay beds for the indigent. The courtyard was bright with flowers and was a pleasant place for the convalescents to rest.

## HOSPITAL BONIFAZIO

The history of syphilis is always interesting and we find a bit of it here in this old hospital, founded in 1376 by Bonifazio Lupi, Marquis of Sargon, who was captain of the people of Florence. Later the Hospital for Incurables was joined to it and in 1552 it was opened to receive patients with syphilis, which had been spread in Florence in 1492 by the troops of Charles VIII on their return from Naples. This hospital has a lovely little church attached to it called "St. Anna."

Florence being a military center we find the

Military Hospital in the old Monastery of St. Agatha, built in 1185. The dates given show the ages of the hospitals which are still doing business in the year 1925.

#### HOSPITAL SANTA NUOVA

In this hospital, the oldest in Florence, we have a goodly tale. In the year 1288—Monna (abbreviation of Madonna-Mistress) Tessa, governess in the house of Folia Portinari, father of Dante's Beatrice, gave her master the idea of founding an asylum for the poor. In 1334 the convent of S. Equite was bought and the hospital transferred there. Later in 1574, the building was enlarged and the portico and facade facing the square was added and since then other buildings have been erected until now the hospital consists of a large number of units with separate departments devoted to physiology, pathology, etc., where teaching is carried on. There is also a splendid library. In the old church and convent portions are many fine works of art. In our own country we do not expect to see famous paintings, sculpture and other objects of art in our hospitals but we find them here in Florence.

Beatrice—Dante's love—was greatly interested in the hospital. She was known all over Florence for her charitable works. Dante tells us "She came into such favor with all men that when she passed anywhere folks ran to behold her, etc." You may read the whole of it yourself if you wish in his life—a poignant biography.

Much could be written about Florence in a medical way. For example, it is claimed that spectacles were invented by a Florentine named Salvio de Armato in the 13th century. In fact, the medical history of Italy itself is wonderful. The Surgeon's House in Pompeii with its collection of instruments, many of which differ but little from those in use today. The life and work of Michelangelo and Leonarda da Vinci in the anatomical way—the History of Syphilis by Fracastorius. Speaking of Leonarda da Vinci, it is said he started dissecting in order to improve his art. His interest in anatomy soon exceeded his artistic work and his anatomical note books show him to be one of the greatest biological investigators of all times. He was hundreds of years ahead of his time. These books have only recently been published—had they been produced during his life time Anatomy would have advanced by leaps and bounds. Leonarda is said to have been one of the first to draw correct figures of the skeleton. In the work on muscles he excels because of his artistic training.

A sculpture of interest to physicians is the "Doctor's Diagnosis," a medallion on the Campanile, said to be by Giotto,

showing the physician in his office surrounded by his jars and ampulla, holding in his hand a glass jar which evidently contains urine. There is a very wise look on his face as he holds the flask high in the air and examines it with an air of wisdom. In the entrance to the Uffizi gallery there is a fine monument to Francesco Ridi, who while a physician, was more noted as a naturalist. He gave the death blow to the theory of spontaneous generation by showing that when maggots developed in putrifying organic matter, it was because eggs had been laid there by living creatures. His statue shows him standing with the Aesculapian staff with the serpent coiled about it but also with a lyre—this indicates he was also a letterateur as well as physician.

#### PISA

In Pisa—the town of the Leaning Tower and Galileo's great experiment, we find in the famous Campo Santo, a wonderful monument by Thorwaldsen, the great Danish sculptor of Berlinghieri, who was a famous eye specialist of the 19th century. This monument is one of the most interesting sights in a world famous cemetery.

Now we must leave Italy with many regrets and plan to come again.

#### PARIS

Have you read Clara E. Laughlin's book, entitled "So you are going to Paris?" If not, I am sure you will find it most worth while. In this book she makes reference to many things of interest to physicians. By all means read it before you visit that most delightful of all great cities.

The hospitals of Paris are many and are well worth visiting, not only to see the work done but also to visit institutions where so much medical history has been made. The French have always been great clinical teachers and many of the members of the Faculty have been men of most delightful character whose life history is, to say the least, thrilling. The names of Pasteur, Claude Bernard, Brown Sequard, Dupuytren, Charcot, and others show what has proceeded out of this city and country. Many of the hospitals are very old and lacking in some of the many things we consider essential but you will be surprised at the work done. Now many of them are being rebuilt and brought up to date.

#### CHARCOT AND SALPETRIERE

Take the Hospital de la Salpetriere, so-called because there was once an arsenal and gunpowder magazine there under the reign of Louis VIII. Louis XIV erected new buildings including a church and the place was made into a pauper and insane asylum. The stories told of the treatment of the insane at that period

seem incredible compared with the methods now in use. In 1678 Louis XIV had a special building constructed for "Undisciplined and incorrigible women and girls." This place has been the scene in several stories. "Manon Lescant" by Abbe Prevost has a scene laid here and one of the courts is named Cour de Manon. One of the characters in the famous diamond necklace story of Marie Antoinette was imprisoned here.

Our interest however lies in the great work done by Doctor Philip Pinel who was the first man to treat insane people like human beings instead of animals. In this old hospital they were shackled with chains, neglected, abused and often starved. He changed all this and is regarded as the pioneer in this work.

After Pinel comes Charcot who was the greatest man ever connected with this ancient hospital. For over thirty years, Jean-Martin Charcot, labored here on the great epoch making work. Charcot was born in Paris November 29, 1825, served as interne in the hospital in 1848, Doctor of Medicine in 1853, he was appointed the same year Rayer's Chief of Clinic. He then became attending physician to the Paris hospitals in 1856, and adjunct professor at the faculty in 1860. It was in 1862 that he entered the medical service of the Salpetriere where he served the rest of his life. It was at Salpetriere that Charcot studied the affections of the nervous system. He was a most ingenious person and constructed apparatus to help in his experimental work, formed a pathological museum and a research laboratory for photography and electrotherapy.

Charcot was a great teacher and his lectures were always followed with great attention. Students from all parts of the world came to his clinics and lectures. One writer says, "Charcot had an awe-inspiring presence, an air of distinction and a manly vigor. Having a clear cut profile, he reminded one somewhat of Napoleon. With clear voice he spoke fluently but without effort for he considered the systematic association of ideas of more importance than eloquence. Charcot was above all the head of a particular school. So instructive, so replete with new ideas were his lectures, that he was soon surrounded by a group of faithful students who soon grew in numbers. Thus was formed the Ecole de la Salpetriere, creator of eminent neurologists, for many of Charcot's pupils have become celebrated teachers. While he was in the height of his wonderful career, he made a trip to the Morvan, where he died suddenly from an attack of angina pectoris.

In the library attached to the hospital one can see his original drawings and notes on hysteria, epilepsy and allied conditions. I was surprised that better care had not been given to these relics of a great physician. The library is complete as he left it and is kept locked

but the original drawings are rolled up and placed in a drawer. Charcot was the founder of our modern school in suggestive therapeutics and nervous diseases. A great benefactor to mankind.

#### HOSPITAL TARNIER

Over in another part of the city is a different sort of a hospital, the Hospital de la Clinique Tarnier, named after that great master of obstetrics. Here one finds a large clinic devoted to mothers and babes. On the side of the building facing two streets is a marble sculpture showing Tarnier standing by the bedside of a mother. The babe is in a basket at the foot of the bed as is the custom in the French maternity hospitals. The master stands there with a smile on his face, the mother looking up at him with a face full of love and confidence and underneath is this inscription.

TARNIER 1828-1897

"Au Maitre qui conserva su vie aux meres et aux Enfants.  
Les collegues ses elevés se amnis Ses Admirataves."

What more can be said of a man than "He consecrated his life to the Mothers and Babes."

In this clinic there is a complete moving picture outfit. Through the courtesy of Doctor Jean De Manet, chief of the surgical division, I was shown about. The doctor is not only an obstetrician and gynecologist but an expert photographer as well. He showed me some of his slides of microscopical sections and they were fine. He was a most delightful young man who spoke excellent English as a result of his service in the English Army during the Great War. In this hospital they use condensed milk exclusively in feeding babes who require artificial feeding—no wet nurses. A well known brand of Swiss condensed milk is used as they consider the Swiss milk the best.

For the luetic cases they are using intramuscular shots of bismuth and quinine—a preparation known as "Quinby," a proprietary product apparently. An ampule of 3 c.c. twice a week—a course of from eight to twelve injections being used—guided by Wasserman tests. For routine examination per rectum they use a two fingered outfit—as if you took two fingers off a rubber glove and left a little rubber to act as a shield. Dry sterilization is used and the wooden stethoscope is preferred instead of the type used by us.

#### HOSPITAL LAENNEC

Back behind the Bon-Marche, one of the great French department stores, is the Hospital Laennec, or Home of the Incurables. This is a very old Hospital but is being restored and in the rear several new wards are being erected. In the entrance court is a bust of



Trugot 1727-1784, and to an American this wording on the pedestal appeals

Principal Subscriber

Lt. Colonel H. A. Dupont de Nemour

United States Senator

The patients in this hospital wear long blue bath robes when out of doors. The name of the hospital recalls that brilliant young French clinician, Rene-Theophile Hyacinthe Laennec, who made himself one of the leading lights in all the history of medicine by his invention of the stethoscope in 1819 and by the publication of his great work entitled "Traite de l'auscultation mediate in 1819." Laennec was the first to place the diagnosis of heart and lung disease on a sound basis. His life story is of great interest. In this hospital Marie Jean Simon, one of the guardians of the Dauphine, spent her last days. As did Rosalie Lamorhere, the girl who served Marie Antionette while she was a prisoner in the Conciergene awaiting the trial which ended at the guillotine.

In many of the hospitals I saw a small cafe where meals could be obtained by visitors and a little shop where wine and delicacies could be bought for the patients. In all of the hospitals beside the sign for "quiet" were these words: "Do not waste the bread."

#### THE AMERICAN HOSPITAL

I must not forget to say a word about the American hospital of Paris. This is the only permanent hospital in Europe for Americans exclusively. It is situated just outside Paris at Neuilly-sur-Seine. This hospital is doing a wonderful work and unless one has had personal experience with sickness in a foreign city they cannot realize what a blessing this is to Americans. To be under the care of American doctors and nurses is a thing to be thankful for. The hospital is now having a campaign to raise money for further expansion and any subscriptions will be greatly appreciated.

#### ACADEMY OF MEDICINE

Next to the world renowned Beaux Arts on the Rue Bonaparte (a fascinating old street filled with little shops selling all sorts of prints, books, etc.) and near by the Charity hospital—still in use—founded by Marie de Medici—is the Academy of Medicine. In the entrance hall are life-sized statues of the Baron Larrey—Napoleon's chief of medicine and the first man to use an ambulance in warfare, Broca, Nelaton, Pean, Roger, and others of the famous French medicine men. This is what appeals to me, the keeping green in our memory of the men who have made possible the present in medicine. Paris is full of these mentoes—the hospitals are named after physi-

cians. Besides those I have mentioned there is the Hospital Necher, Lariboisiere, Tenon, Bichat, Broussan's, Broca, Claude Bernard, and Bandelocue. Streets are named after Ambroise Pare, Rue Bichot, Boulevard de l'Hospital and Rue Medecin. In every hospital you find statues and casts of the men who labored there.

Back to the Academy of Medicine for a moment. There is a large meeting room with a desk for each member, a rostrum, lantern and etc.,—a small library and all convenience for a medical society are contained in this fine building. Any medical society would be proud in the possession of such a completely equipped institution.

#### L'ECOLE DE MEDECIN

On the outside of one of the buildings of the School of Medicine is a tablet in memory of the 1800 doctors killed in the Great War. The school consists of a group of buildings on both sides of the Rue de L'Ecole de Medicine. Here in one of the buildings is found the Secretary of the "Association Pour Les Relations Medicalis Avec L'Estrangers," or in plain English the information bureau for doctors who wish to take up medical work in Paris. Here one obtains, through the young lady secretary, who speaks excellent English, all necessary information for which there is no charge. She gives you a map of Paris with all the hospitals marked on it with directions as to what "Metro" or underground train to take. Schedules of clinics and work are also furnished.

#### POST-GRADUATE WORK IN PARIS

There are courses without number in every branch of medicine, surgery and the specialties. The prices are wonderfully low, due of course to the present rate of exchange. Five to ten dollars will pay for a course in almost any subject. At the same time one can take courses in the Sorbonne at very low rates. Anyone who has a working knowledge of French and wants to do Post-graduate work in Europe should by no means neglect Paris. Living can be had most reasonable and if one has extra time it need not hang heavily as there are all sorts of museums, exhibitions, and of course music and other form of diversion if one craves them. Speaking of museums, there is the Musee Orfila with its comparative anatomy and the Musee Dupuytlen, named after that master of surgery, housed in the ancient refectory of the Cordeliers. These were not doctors but Francisian monks and their story invites further study. The ground on which the school of Medicine stands was given to these monks by Saint Louis—but enough—here in this ancient building is a large collection representing many different lesions which you may see with your own eyes.

## MUSEE de l'HOSPITAL SAINT LOUIS

One of the most complete collections of its kind is in the Musee de l'hospital Saint Louis where one views the famous Fournier's collection of skin and syphilitic lesions almost life-like in wax. This collection is of especial interest to all dermatologists for here are examples of every known skin disease. In this museum are also housed the collection of embryologic malformations collected by Dr. Parrot and the specimens of tumors of the bones and joints made by Peans. A place to spend hours and days in. In the Hospital due Vol-de-Grace is a very important collection of the surgery of the late war.

## LIBRARY OF THE FACULTY

The "Bibliothèque de la Faculté" is a general reference library in medicine—there are special libraries at the Salpetriere containing, as mentioned, Charcot's collection; at the Hotel Dieu is the surgical library and a special collection by Prof. Hartman on ophthalmology.

## MEDICAL MONUMENTS

Among the monuments in Paris of medical interest is the one to Pasteur in the Place de Breteuil. This is about twenty feet in height and shows Pasteur seated on the top and below are life-size figures symbolic of his great work. One shows a shepherd with his flock and another a farmer with his steers, referring to Pasteur's work in cattle disease. The front shows a mother with her daughter in her arms with a figure of Death bent down moving away. The idea being that Pasteur's aid has driven death away. A wonderful tribute to a great man. I finish these remarks about Pasteur with this quotation:

Pasteur's scientific life had an admirable unity; it was the logical and harmonious development of one and the same thought. Of course he did not know when he made his first studies in crystallography that he would end by discovering a means of preventing rabies. But neither did Christopher Columbus know when he set forth, that he would discover America. He only divined that by going in the same direction he would discover something new. So with Pasteur.—Emile Declaux.

Back of the Madeleine at number 17 Boulevard de la Madeleine, lived that great man Lavoisier and here you may see a statue of the great chemist and physicist, the man who made the original experiments in the estimation of the respiratory metabolism of man. He was a distinguished teacher and had many famous men as his pupils. He was condemned by the Tribunal of the Revolution and they cut off his head as they did to many other of the best blood of France.

## INSTITUTE MEDICO-LEGALE

One of the sights of Paris of old was the Morgue back of Notre Dame. The little red building is now gone and we find the Institute Medico-Legale at the Place Mayas taking its place. This new institution is very complete—there is a large refrigerating plant, the bodies are not exposed to view as formerly but are brought into a room with glass front for identification—no more morbid curiosity. There is a large amphitheater for teaching purposes and several small autopsy rooms for special work. Upstairs are chapels and offices while the floor above has the laboratories for Toxicology and Medico-Legal Research. To visit the Morgue is no easy task. One must obtain an order from the Prefecture of Police and this office will only issue a permit upon receipt of a letter from the American Ambassador. This is easily obtained by means of a personal application with your passport to the chancellery of the American embassy at number 5 Rue de Chaillot between 10:00 a. m. and 12:30 p. m. It is wise at the same time to get a letter for a permit to visit the various museums, libraries, etc. In this way one can save a lot of time as many of these places are closed to the ordinary visitor. This permit gives one an entirely different standing, especially if one's French is not what it should be. It is a liberal education to browse around the hospitals whose very names are full of such glorious memories. While it is not absolutely necessary to have a permit to visit many of the hospitals it is better to obtain an official permit by presenting oneself at the office of the Administration Generale de l'Assistance Publique a Paris at number 3 Avenue Victoria. Here you will be given a little booklet authorizing you to visit all the hospitals, their addresses, together with a word describing the hospital, whether general or special, and the type—maternity, children, etc. With this in hand you will have no trouble. Do not go before 9:00 a. m.,—the hours are usually 9-12 m. You waste your time between 12-2 p. m. Go and take lunch at some outdoor cafe and enjoy the sights as you eat. Paris is a wonderful city for the study of medicine but one should have a knowledge of French in order to benefit the most. No one as far as I can find has written the story of Paris from the medical standpoint. For the man who has the time and ability there is a fascinating story to be told about Paris and her medical men—her hospitals and clinics. Just for example—a sad one—do you know that Marat, that monster of the Revolution, was educated as a physician? It is surprising the number of men who have made history of various kinds have been educated in medical schools.

Now we must bid "Adieu" to Paris and hasten on.

## FREIBURG

*"Z' Freiburg in der Stadt  
Super isch's und glatt  
Riehe Herre Geld and Guet  
Jungfrau wie Milch unt Bluch  
Z' Freiburg in der Stadt"*

Old Poem.

Freiburg, the home of the Dammerschlauff, is a delightful little university town in Germany about an hour's ride from Basel, Switzerland. In the entrance hall of the Frauen Klinik is a bust of Hegar with this wording:

Director of the Frauenklinik  
1864-1904

Presented by his Friends.

Hegar was one of the pioneer workers in pelvic surgery and a teacher for many years.

The present chief of the clinic is Prof. E. Opitz, who is still carrying on the work. While there the Professor said, "We even have American women come here for their confinements." This was said to me as he ushered a lady out of his consultation room. Guided by one of his assistants I was shown through the clinic. The arrangements of double padded doors and windows in order to obtain quiet and the other methods used are all too well known to require detailed explanation here. In conversation with the Resident I was told they used smaller doses of morphine and scopolin than formerly. A new preparation called Gynergan-Sandoz is used instead of Ergot. The record sheet used is most complete. The clinic is situated on the university district. The idea of having all the medical activities grouped is a fine one as it saves time. Freiburg should be a very nice place to work in, beautifully situated, with fine shops and good coffee houses where you may also listen to good music between clinics, makes one think of the stories of student days. At least as the little poem at the beginning indicates.

"Z' Freiburg in der Stadt."

## BRUGES

The quaint old hospital of St. John, built in the XII Century, in the ancient city of Bruges, famous for its bridges, canals and Carillions, has been very little altered since and is still in use as a general hospital. Here in the roof you can see the great Red Cross painted to warn bombing planes of the enemy in the war. The principal reasons for visiting this hospital are two, first to see one of the few remaining examples of a medieval hospital, and secondly to view the famous paintings by the painter Memling—reputed to be the most wonderful of their kind in the world of art. The pictures are exquisite little gems painted on a large cabinet and show the Adoration of the Magi, the Birth of Christ, the Escape into Egypt, and other Biblical scenes. People come from

all over the world to view these masterpieces. In the pharmacy attached to the hospital are some queer old relics of old time druy making. One doesn't ordinarily think of a hospital as an art museum but here is the combination.

## BERNE

The Swiss capitol is a pleasant town resting on the high plateau between the Jura and the Alps. It is not too large but being the capitol it has all the advantages of a large city without its disadvantages. Berne has many hospitals and clinics, celebrated ones, which are known around the world. Institutions which have had their share in spreading Berne's international fame as a surgical and otherwise curative center. There is the great Insel hospital with its many pavilions in the western part of the town. Upon the hill is the university, the center of the student life of Berne. In front of the university is a bronze statue of its founder—Albrecht de Haller, the greatest physiologist of his age. His life is unique one. Not only was he a great physician but a master poet as well. His poem "Die Alpen" published in 1728 was the first to draw attention to the beauties of the Alps. Garrison, in his history of medicine, which in my humble opinion is the best book on medical history in English, tells the story of this physician, physiologist, anatomist, and botanist. He made many of the discoveries which are now classified as new. Read the article and you will be well paid as you will by owning this book and dipping in it anywhere. Berne is the home of Kocher, the thyroid doctor, who does his work in the Kocher Spital, a private hospital. Among the other hospitals are the Jermer, City hospital, Woman's hospital, the Ziegler and Bouriosti. There are many fine looking private hospitals or clinics like the Salem, Linderhof, Feidigy and Victoria. All these are well equipped for the care of the sick.

Berne is a mecca for the sick not only of Switzerland but of people from the United States, England and other countries. The Swiss have developed all the possibilities of their little country in every way. The treatment of the sick is not the least of these as one can notice by the amount of attention given to the various sanatoria. One can get almost any kind of climate, sunshine, water, altitude, or what you will in the line of natural therapeutic measure. One will find excellent hotels of all grades for the Swiss are the world's most noted hotel keepers. Near the little town of Leysin, Dr. Rollier does his marvelous work on tuberculosis, a place much visited by the sick and physicians interested in this work.

## PHYSICAL THERAPY IN EUROPE

I was struck by the fact that in England, France, Germany, Austria, Switzerland, and



Italy, how much more attention is given to the various "cures." You read in the society columns that "Lord So and So" is taking the cure at Harrongate or Leamington in England, at Evian or Vichy in France, at Baden-Baden or Nauheim in Germany, Bad-Aussee in Austria, or at some "spa" in Italy or Switzerland. These places have their regular season and it is almost impossible to obtain accommodations at the height.

They are all run on the same general lines—some sort of water—sulphur, iron, alkaline, radio-active, what you will, which the people drink and bathe in—with massage, diet, exercise. There is always a park with its Kursaal where the excellent band plays. Then there is the opera, theater, gambling, dancing, golfing, tennis and horseback riding to fit in between the taking of the waters.

Everything that human mind can devise to assist in passing the time away is at hand.

All this of course must be paid for, a tax is levied on each visitor, a very small amount, but sufficient to pay for the music and upkeep of the streets and other public necessities. The Kursaal is the center of the social activities and one can have a good time just watching the people. I wonder why the people who are in the same business in our country do not study the psychology of this cure resort and apply it here. I am thinking particularly of our Mt. Clemens. What a dreary hole to stay in while taking the baths. It would mean money in their pockets and that ought to be of interest to the owners of the bath establishments.

There are physicians in all these cure towns, well educated men who are expert in the use of hydrotherapeutic measures, diet, massage, electro-therapeutics, whose whole work is along these lines. They use very little else and get good results. Whether it is the change of scene, diet, drinking water and paying for it, stopping the alcohol, the graduated walks in the park and on the mountain sides, anyway they go away feeling better and return again the next year.

The uses of the various electrical forms of energy like the ultra-violet, galvanic current and diathermy, together with the natural sunlight is being used much more extensively than in this country. Those of you who have listened to Doctor Crumberbatch will realize how much this form is being used in England, Cambridge now offers a six month's course in radiology and physiotherapy with a diploma.

In France at the Salpetriere one can obtain opportunity for study along this line.

Vienna and Berlin use hydrotherapy and radium and much is made of the various forms of inhalations where pine and other oils are used in the treatment of the various pulmonary conditions. The great man in Berlin is Nagel-

schmidt who was the originator of the word "diathermy."

#### LONDON

John Gay, who wrote that delightful, whimsical "Beggar's Opera," is the author of a little book entitled "Trivia," or "The art of Walking the Streets of London." It is a capital book to use as a guide in seeking out odd corners and there is no city so suited for this purpose as London. Dickens loved to do it. The streets of great cities have always had a fascination for poets and writers, from the Psalmist who walked about Zion telling about the towers thereof, to the mystic who mused on the domes and temples of London asleep in the morning light. Gay also wrote a poem describing the ravages of lues which is a classic of its type. Speaking of books have you read Lytton Strachey's book entitled "Eminent Victorians?" If not get it and read the life of Florence Nightingale, "The Lady of the Lamp," and get an entirely new view of this great woman. With her life in mind I made a pilgrimage to 10 South Street, Park Lane, where the "Lady of the Crimea," lived and died. On the front of the house is a tablet inscribed:

Florence Nightingale  
Born 1820                      Died 1920  
Lived Here.

Strachey's book gives a most penetrating look into one of the famous characters of history. She was not only the founder of modern nursing but also the one who brought about the first real medical department in the British Army. Not a medical or military man but a woman was the founder of the modern civil and military hospital. Read the battles she had with the red tape of the English army and the struggles with the medical heads. It is enough to make the Gods weep. The author is none too kind with her but nevertheless she was a great woman in her own particular line even if the searchlight of the writer reveals glimpses of other phases of her manifold character. At St. Thomas hospital she opened in 1860 the Nightingale Training School for Nurses, thus becoming the founder of modern nursing. Her great book was published in 1859, entitled "Notes of hospital construction and management. Today there is no great hospital that does not show the impress of her mind. In the Nurses Home at St. Thomas Hospital is the room she used and many interesting mementoes of her still remain there. This naturally makes the old hospital doubly interesting.

#### ST. THOMAS HOSPITAL AND MEDICAL SCHOOL

No one knows when the first hospital of St. Thomas was built. Probably along in 1200. This was afterwards destroyed by fire. The

hospital went through many changes until it reached the present condition which it occupies on the south bank of the river, facing the Houses of Parliament, while its opposite side looks toward one of the poorest districts of London. The hospital was one of the first to be built in accordance with modern ideas, a series of blocks separate but each connected by corridors. The capacity is 632 beds. In the hospital I saw the well known London surgeon, Mr. Mitchiner, operate. The operator and nurses wear short rubber boots because the floor is wet from the frequent use of water being used in rinsing off the rubber gloves. In the clinic room adjoining the hospital is the following notice which might with advantage be placed in our own hospitals especially those doing a large amount of charity work:

## NOTICE

The Governors reserve to themselves in the interest of the Public, and as one of the conditions of admission to this Hospital, the right of causing a Post-Mortem examination to be made in the case of every patient who dies in the Hospital for the purpose of accurately determining the cause of death. In event of relatives being opposed they will be seen by the Steward who shall submit their objection to the Resident Medical Officer and if he thinks there is no urgent necessity it may be dispensed with.

The medical school is one of the foremost in London and has many students. Resident positions are eagerly looked for by the graduate.

London is coming to be one of the great post-graduate centers of the world, especially to the English speaking races. The great difficulty as has been stated in France, Germany, Austria and Italy, is the one of language. In London this does not exist.

Through the Fellowship of Medicine and the Post-Graduate Medical Association located at 1 Wimpole Street, in the building of the Royal Society of Medicine, one can obtain any desired post-graduate work in the London hospitals and medical schools. A letter addressed to the above number will get you the program and for ten shillings a year one receives the monthly bulletin, this including admission to certain lectures without further charge.

London like Paris is a delightful place to stroll about. Go into the Royal College of Physicians and see the many fine oil paintings of distinguished English men of medicine, see the old amphitheater where epoch making talks have been given and browse in the famous library with its wealth of old tomes. Meet the secretary of the college, Mr. H. W. Barlow, a delightful chap, who will show you his collection of book plates of doctors. If you have one of your own he will be glad to add it to his collection which is to be placed in the library for future generations to look at.

A walk through Westminster Abbey shows that the physicians are not forgotten. Lister, Braille, Simpson, and others of our craft are to be found in this holy place.

Another sight of interest is the fine building just opened by the British Medical association. The dedication was honored by the presence of King and Queen and marks a new era in British medicine.

Nearby Dickens' Old Curiosity Shop is the Royal College of Surgeons with its famous Hunterian collection where hours may be spent in a most profitable manner. There are so many places of medical interest that I can only offer you the above few as suggestions.

## SALESBURG

On an ancient building near the bridge in Salzburg, Austria, is the following inscription:

Theophrastus Paracelsus get zu Einsiedeln  
1493 liebete in diesin Hause-starb 1541  
Theophrastus von Hohenhelm gemant  
Paracelsus  
der in diesen Hause 1540-1541  
Zum Gedachinus  
Die Deutsche Gesellschaft fur Geschiete  
Der Medizin und des Naturvoissenoschaft.  
Liodhoff.

Here in the Austrian Tyrol lived for a while in his strange career the founder of chemical pharmacology and therapeutics. He led a life that was most fascinating and which would make a good hero for one of Locke's novels. A swaggering, gypsy type, he mingled with all sorts of people and learnt something from each one. Browning made him the hero of his great poem, "Paracelsus." He was one of the first to throw off the shackles of Galen. Was the first to write on miner's disease, and as Garrison states was the only asepticist between Mondeville and Lister. He made opium, mercury, and many other drugs. It was at Salzburg and roundabout that he made his original studies in cretinism and endemic goitre.

In an old "Gasthaus" called the Traunmuhle near Bad-Aussee, owned by my friend Herr Haas, I found two pictures painted on metal called the "Goitre man and his wife." Both are painted with the typical goitre of the region. The upper garments are loose about the neck so that the goitre hangs down free from pressure.

The region here is called the Salzkammergut or Salt mine country and is not only a goitre center but has many remains of the ancient Celts found at Hallstatt. Here is a little museum where you may see the remains of the Celts who lived in houses built on piles in the Hollstatter Sea.

## CONCLUSION

Why doesn't some one write a "Guide Book for Doctors." We have guide books, red and blue, and of all kinds for the various great and small cities, the museum and art galleries. With the single exception of Vienna where the American Medical association of Wien has a "blue book" for American students I know of no book along this line. By the way, American students properly vouched for by the American Medical Association, will have 50 per cent of their visa fee deducted by the Austrian government. There is a wealth of material of course in Europe—fine schools, hospitals, clinics, and great teachers. There is the glamour of distance but there are difficulties, the greatest of which to most Americans is that of language. We know English but as a rule our French and German suffers from a lack of practice.

So while I acknowledge most freely all the things mentioned I feel that we in America should develop our own resources along this line to a greater extent. Some good work is being done but there are not yet the opportunities to take courses both long and short of all kinds that are so freely offered abroad. The richest country in the world, institutions and men of ability who will I hope take the opportunity to create in America a Mecca for medical men.

## USEFUL ADDRESSES

London—1 Wimpole Street, Fellowship of Medicine.

Paris—12 Rue de L'Ecole De Medicin, Information bureau.

Vienna—IX Spitalgasse 21. American Medical Association.

# CONGENITAL HEART DISEASE, REPORT OF A CASE WITH UNUSUAL COMPLICATIONS

MILTON S. FELDMAN, M. D.

DETROIT, MICHIGAN

The relative infrequency with which congenital cardiac disease appears after the adolescent age makes these cases of clinical interest though less important than the more amendable forms of acquired cardiac affections. Incompatibilities with life, primary or secondary complications accounts for the early high mortality rate in the congenital heart cases—although at times one meets an individual who has lived beyond the average span of life none the worse for the presence of some congenital anomaly.

This case is reported because of unusual complications occurring in a case of "Morbus Caerules" (Blue Baby) who has reached the age of 19.

I was first called to see the case on October 6 after she had expectorated about ten ounces of bright blood following a short coughing spell. This history is interesting and is as follows:

*Family History:* Mother and father living and well, one brother and one sister living and well.

There is no history of a similar complaint in the family either on the paternal or maternal side.

*Past History:* She is the first child of three children and was born normal delivery at ten lunar months. At birth she was immediately recognized by the attending obstetrician as a "blue baby." The right recumbant position had no effect and two months later an interview with another physician firmly fixed the diagnosis of congenital heart disease.

Until the age of four she enjoyed relative good health only showing a cyanotic tinge of her ears, lips, eye lids, nose, fingers and toes. Occasionally she became dyspneic on exposure to the cold. At the age of four she contracted small pox but made an uneventful recovery. At the age of seven she had measles and likewise recovered without any complications.

At the age of eight she contracted diphtheria and seemingly on the road to recovery she developed a punctate rash ten days after the diagnosis of diphtheria was made. This rash was diagnosed as scarlet fever. A right sided otitis media also developed and was followed by delirium. In view of her congenital heart her condition was considered grave.

After several days of marked excitement she became quiet. A physical examination revealed a flaccid paralysis of the extremities and also the vocal cords. A diagnosis of post diphtheritic paralysis was made.

In the course of the next ten weeks she gradually began to improve. Her voice returned and also some motion in her left arm and leg. She never completely recovered. A residual paralysis on her right side in the form of wrist drop and also toe drop is present today. Her left side is well. Her voice also returned without defect.

Until the age of sixteen she enjoyed fairly good health and then suddenly she began to have purposeless movements which was diagnosed as chorea. She did not recover from this until about six months ago—two years after the beginning of the attack.

*Menstrual History:* Menses began at the age of fifteen, irregular, lasting about three weeks and often returning after a rest period of two or three days. There is no history of clots, Leucorrhea dysmenorrhea, headache or backache.

*General History:* She occasionally suffers from colds and tonsillitis and also of constipation. There has been no loss of weight, night sweats or cough. No nocturia or frequency.

*Present Illness:* Following a coughing spell she expectorated some blood. She denies having coughed until the present spell which brought on the hemoptosis.

*Physical Examination:* The patient was very anxious and restless. She was coughing and expectorating bright blood. Her entire body was of a cyanotic tinge, which was marked on the lips, eye brow, nose, fingers, ears and toes. Her apparent weight was about eighty-five pounds. Her extremities showed evidence of atrophy due to disuse. Her right forearm showed a wrist drop and she held her fingers in the pillroll position. Both her hands showed marked clubbing of the fingers. Her right lower extremity was shorter and thinner than the left with free motion in all directions. Her eyes reacted to light and accommodation extra ocular movements were normal.

Nose—Negative.

Sinusitis—Negative.

Ears—Negative. No mastoid tenderness.

Mouth—Tonsils 4 plus, teeth fair shape.



The laryngeal mirror showed blood coming from the larynx.

No percussion of the chest was attempted because of the hemorrhage.

Auscultation revealed a few gurgling rales in the upper left lung at the level of the 2nd intercostal space where apparently the blood was coming from.

Her heart apex was in the sixth interspace at the anterior axillary border and at a later date the right border was percussed two finger-breadths to the right of the sternal margin. The apex beat was rather diffuse. The pulmonic second sound was accentuated. A systolic murmur could be heard best over an area which corresponded to the center of the auricles as outlined by percussion topography. The murmur was swifty in character and extended into diastole. A diagnosis of patent foramen ovale was made.

*Abdomen:* The liver just palpable at the rib margin, the spleen was not felt. There were no areas of tenderness nor masses felt in the abdomen. The right leg showed Babinsky and Oppenheim present but no ankle clonus. The leg was about one and one half inches shorter than her left and the foot showed a talipes cavus with some equinovarus.

The patient was immediately given one-half grain of morphine and received one-quarter grain morphine every two hours or as necessary to keep her quiet. An ice bag was advised to upper left chest and only cold drinks permitted. On the following day she lost about eight ounces more of blood and on the third day she only occasionally coughed up a clot of blood. Dr. Wm. H. Gordon in consultation advised continuation of the same treatment.

On the evening of the third day she developed a sex psychosis. She kept on saying "well bring me a man." Her temperature was 99 degrees. She struggled to get out of bed but was finally quieted by a hypodermic of morphine and hyoseine. The following day she felt better but complained of not being able to move her bowels for the past four days. She was not permitted to leave her bed and likewise no catharsis was administered so as not to force the patient to any form of activity that might bring about a recurrence of the hemorrhage. Late in the afternoon of the fourth day she developed choreoform movements and at night a return of her psychosis. An examination of the eye grounds was negative. There was no Kernig nor Brudzinski sign present. The reflexes were active but not exaggerated. In the morning she complained of her bowels. An enema was ordered without effect. A high soap suds enema also was ineffectual. A large dose of Petroleum did not bring about any relief although the patient complained of terrific pain across the abdomen probably due to the hard fecal masses movement in the intestines. Her chorea remained the same. As the obstipation would be augmented by morphine or the opiates in general they were used sparingly to control the pain. Toward evening of the fifth day her abdominal pains became more marked with no particular point of origin. Her temperature rose to 103 degrees and her chorea was most pronounced. Twice during the night she ordered an imaginary man from the room. (The patient has never been out with a man). Her heart was rapid—the sputa however remained blood free. In view of the rise in temperature and increase in pain and in spite of the enemas, a castor oil cocktail was ordered with good results on the morning of the sixth day.

The following few days the psychosis of the first few nights ceased but her chorea continued up until the fourteenth day when gradually she began to show signs of improvement. She had no hemoptosis after the fourth day of treatment. She was advised to remain in bed for six to eight weeks to permit proper healing of the lung. A careful survey of the chest

reveals only a peribronchial thickening with no evidence of any acid fast infection.

#### DISCUSSION

The chorea was probably caused by alimentary toxemia. A laxative would have been given at an earlier date but it was feared that the activity following would bring about a recurrence of the hemorrhage although the activity on the third night was without any deleterious effect. Measures were taken to prevent another recurrence of the hemorrhage.

#### WHY PHYSIOTHERAPY?

ARTHUR E. SCHILLER, M. D.,  
DETROIT, MICHIGAN

A friend who was discussing the practice of medicine once said to me, "With all the drugs in the pharmacopea, why physiotherapy?" I am endeavoring to answer this question.

A few years ago when the treatment of disease by other than the most orthodox methods was mentioned, it was done in a most circumspect manner, and then accompanied by almost prohibitive reservations. Then came the war and with it the recognition in rehabilitation camps and in government industries that physiotherapeutic measures had as definite a place in the treatment of injury and disease as had the old time-and-tried internal medication and surgical procedure.

Quick to realize that it was to their advantage to spread propaganda for the use of the new measures, were the companies manufacturing apparatus of various types. Some of this they deserve great credit for, but being in the business for the purpose of making money, quantity production became the aim and the truth was unquestionably stretched to some extent. Hanging along the tail of the pendulum, which was now swinging in a wide arc, came all the cults and isms, leaving a large, dark smudge in their wake. These were of the type who, to quote Fishbein, the editor of the A. M. A., "believe that high frequency means the treatment of eighty patients a day."

Continuous experimentation with the constant elimination of untrue and untried statements changed that aspect rapidly. The adoption of physiotherapy by the hospitals throughout the country; by the industrial boards and commissions and the adding of a chair of physiotherapy to the curriculum of many important colleges and universities, is beginning to present a true light on the subject of physiotherapy. I think that W. H. Mac Cracken, Dean of the Detroit College of Medicine, strikes a true

note, when he makes the following statement: "It may be said that physiotherapeutics often lends itself to accurate observation better than does drug therapy. A grave danger at this stage lies in the possibility of encountering apparent therapeutic miracles, which seem constantly to occur and are bound to impress the student unduly, and to create in his mind the idea that he is dealing with an agent of general curative properties, which will help any patient, no matter what may ail him. Cold water must be carefully poured over excess enthusiasm, and the student's feet must be securely planted on the ground. After a little, he will pass the miracle stage and he will see physiotherapy as just what it is, an extremely valuable weapon for him to use with careful judgment in his combat with disease and suffering.

"The fact remains—physiotherapy is here, knocking on the doors of the medical schools, and demanding no small place in the community of courses, which we will call the curriculum. Those schools which have as yet failed to provide such a place will find themselves compelled to take action in the near future, or else will behold the spectacle of some of the ablest of their would-be student's going astray after alluring therapeutic gods."

With this short preamble, we will take up the major therapeutic measures.

#### ULTRA VIOLET ENERGY

The most discussed portion of the radiant heat and light treatment at the present time is that of ultra violet energy. The value of this treatment is admitted by all. Every medical man in general practice has seen diseases caused, or aggravated by the absence of ultra violet energy and cured, or relieved by its presence. Its curative action is, apparently, due to a stimulating action on the skin and its glands; that is to say, the consecutive effects are increased cutaneous circulation, increased cellular activity, and increased cutaneous nutrition.

Hess, Unger, as well as numerous other observers have shown beyond the question of a doubt that ultra violet energy is a distinct curative agent in the treatment of rickets and allied disorders and that there is a general increase in the amount of calcium and phosphorous found in the blood following ultra violet radiation. No other one agent has shown the same ability to control post-operative infection, infected wounds and infected burns. In all forms of chronic ulceration, the actinic rays are useful for their bactericidal and regenerative action. They are of value in numerous diseases of the bone, osteomyelitis, tuberculosis, etc.,

and in fractures to help increase the amount of calcium and phosphorus in the blood.

Sir Henry Gauvain of the Royal Society of Medicine, in discussing the light treatment of surgical tuberculosis, stated that he considered the light treatment a valuable accessory and that in sinuses, suppurating and discharging glands and bone tuberculosis, the results were far greater than he expected.

In the tuberculopathies in general, the work of Rollier, Finsen and numerous other workers have demonstrated that ultra violet energy, has given beneficial results following Rollier's progressive body irradiation.

#### GENERAL CONSIDERATIONS

The ultra violet ray is applied by two methods; the water-cooled, and the air-cooled. The water-cooled is used for its bacterial effect, or for a counter-irritant effect, according to the dosage. It is useful in the treatment of acne, lupus vulgaris, port wine stains and birthmarks, alopecia areata, cases of dental affections (such as pyorrhea) furunculosis, and infected wounds. These are treated at a close range and the ray produces a reaction which helps to destroy the end products of infection. It is valuable in the treatment of pruritis of the anus and vagina.

The air-cooled lamps emit the longer light waves, between 4,000 and 3,000 angstrom units, the water-cooled between 3,000 and 2,000 angstrom units. The air-cooled rays are more penetrating than the short rays. They produce a greater erythema. They are chemically oxidizing and stimulating to metabolism, while the shorter waves are more bactericidal. The air-cooled lamp is used as a builder. The effects are peripheal stimulation through nervous reflexes increasing the circulation of the blood; increased nutrition; increased local metabolism and phagocytosis. The results are due to increased elimination, relief from toxic condition and increase in hemoglobin. It has an unquestionable effect on the endocrine glands. There is an increase in the ionic calcium and inorganic phosphorous content of the blood serum and in the case of rachitic infants there is clinical and roentgenographic evidence of healing. The ray also produces a fall in the leucocyte count.

#### CONDITIONS BENEFITED BY HELIOTHERAPY

- (1) Tuberculosis of the skin, lungs, peritoneum and bone.
- (2) Rickets, asthma, infantile tetany.
- (3) Disorders of metabolism depending on lessened calcium and phosphorous production.

(4) Various types of skin lesions such as acne, psoriasis, alopecia areata, infective dermatoses.

(5) Skin and wound infections; a stimulant in the epithelialization of wounds, burns and varicose ulcers.

(6) In fractures which fail to unite, together with thyroid calcium therapy; in osteomyelitic conditions.

#### DIATHERMY

Diathermy is nothing more or less than an improved method of employing heat as a therapeutic agent. It cannot accomplish miracles, but wherever heat is indicated, diathermy provides a better method of delivering this heat. The body tissues conduct electricity, but they offer more or less resistance to the passage of the current. It is this resistance to the current which produces the heat. We can localize this heat at any depth and the actively circulating heat of blood causing absorption of products of inflammation promotes tissue oxidation, stimulates metabolism, relieves congestion and thus gives relief from pain.

#### MEDICAL INDICATION

The indications for the medical employment of diathermy are purely the indications for heat. Whenever heat is likely to be beneficial, diathermy is far more effective than any other method of applying heat now in use. With hot packs, baking and the electric pad, the elevation of temperature is largely superficial, whereas with diathermy, the heat can be delivered wherever most desired. However, a diathermy apparatus is not a pocket toy that can be carried around, hence it cannot be expected to replace the less effective, but more easily provided and cheaper means of utilizing heat. But for hospital, or office use in the treatment of certain conditions it is well-nigh indispensable.

In industrial surgery, the early use of ultra violet ray and diathermy combined will produce a condition of surface sterilization and increase of blood to the injured part, saving many days of injury, much loss of time and much money to the factories. In orthopedics, this combined method is found of great advantage, particularly in osteomyelitis, the bones showing a rapid healing after operation and the shortened period of disability and freedom from skin infection is remarkable. In the arthritides, used in combination with the various analgesics, the results have been excellent.

In certain types of acute gonorrheal infections, the reported results have been surprising. The gonococcus is particularly sensitive to alterations of temperature and is

said to be destroyed by a degree of heat a little higher than that of the body. Efforts have been made with various machines to raise the temperature of infected tissues to about 113 degrees Fahrenheit. Naturally, this can be better affected by diathermy than by any other method, but in my hands this method has not been efficacious and I have abandoned it in favor of the more orthodox methods. This applies to the acute urethral infections.

Prostatitis may be treated by a suitable electrode in the rectum and another over the symphysis pubic, and the results do warrant its use, but the condition that is best suited for this treatment is the cervix, using either a glass, or hard rubber speculum and an active electrode of either a copper rod, or a metal disc from one-half to three inches in diameter. When using the disc the cervix and the glands are heated throughout. With the rod electrode the mucous membrane of the canal is treated. Applications are made about twice a week, it taking on the average of five or six treatments to free the surfaces from gonorrhea. In the male, diathermy is more useful in treating the complications of gonorrhea than a primary gonococcus infection.

In the case of epididimitis, the results far surpass that of other methods, a cap-shaped electrode made of lead foil lined with gauze is useful. In posterior urethritis the results from diathermy are as definite as they are indefinite in anterior urethritis. In most cases urethroscopy shows that there are very definite lesions in those cases in which there is a persistent posterior urethral discharge. Infiltrations of the verumontanum and the orifices of the ejaculatory ducts are present, in addition, the mucous membrane is edematous and there are numerous granulations. Destruction of these polypoid masses by diathermy through a posterior urethroscope will best clear this.

"In many patients diathermy alone will not bring about the best results, to obtain which diathermy must be combined with other forms of electro or physiotherapy; hence in any well organized clinic, or hospital, diathermy should simply form part of the electro and physio-therapeutic armamentarium and should best be concentrated under one direction. We often see the administration of diathermy by a nurse, without the supervision of a physician trained in electro and physio-therapy. This is unfortunate, because the secret of results from diathermy lies in the thorough understanding of the underlying principles, the careful selection of patients and close attention to the many details of such treatment. Neglect



of these fundamental requirements can only lead to bad results and to disappointment, or which is still worse, to an extension of the kingdom of quackery." (A. U. Desjardins, M. D. and Ann Kelly, R. N., Mayo Clinic).

Diathermy relieves congestion wherever present because of the marked activity of the arterial circulation.

Diathermy produces marked analgesic effects and relieves all kinds of pain. Relief from diathermy is more lasting than from conductive or radiant heat. The long continued relief experienced by heating the deep tissues is due to the slow return to normal temperature; the cooling of the tissues takes place by conduction through the circulation, while skin cooling is rapid through radiation.

#### TIME OF TREATMENT

The resistance of the skin, the thickness of fat underneath the skin or anywhere between the electrodes, the moisture of the tissues, the density of all the tissues, the reflexes of the patient, the distance between the electrodes, the size of the electrodes, and degree of temperature desired all enter into the consideration of time of treatment. The greater the skill of the operator the better results.

#### CONTRA-INDICATIONS AND PRECAUTIONS

Medical diathermy is positively contra-indicated where there is a recent history of hemorrhage; no matter where the hemorrhage is, that part must be avoided. While papilloma of the bladder are easily destroyed by diathermy, a most disagreeable hemorrhage might occur therefrom through an application of the high frequency current to the prostate. It should not be applied within twenty-four hours of the menstrual period. Pregnancy is a positive contra-indication to its use below the waist line.

Diathermy powerfully stimulates the secretion of glandular organs and consequently should not be applied to the thyroid gland in hyper-thyroidism. It should not be applied to any place where there is a collection of pus and no drainage.

#### SURGICAL DIATHERMY

Surgical diathermy comprises the application of destructive heat to animal tissue and structures. This heat is produced by the high frequency current and is not a direct application of electricity. The heat is either produced by the spark due to the closing and interrupting of the current, or by the resistance that animal tissues offer to the current forced through them. Surgical diathermy

is far superior to the Paquelin, the soldering iron, or the galvano cautery, because it guarantees an orderly procedure of coagulation without any incidental interruption, which is so frequently observed during the use of the appliances above mentioned and which is caused by the cooling off of the instrument, or by the resistance of the scab formed by burning.

In surgical diathermy the heat is concentrated on one spot and when properly applied it effects the destruction by heat coagulation and not by charring, for the heat instead of being developed in the instrument is developed in the part treated and the tissues are firmly coagulated, thus preventing hemorrhage.

The methods of its application are threefold; the unipolar method, utilizing a small active, or one small and one large electrode; the bipolar method, using two small active electrodes; the indirect method, in which the patient lying on a condensor couch attached to one terminal is charged with a suitable diathermic current, which is tapped off to the body of the operator at the point to be destroyed. Space prohibits enlarging on this important phase.

#### ROENTGENOTHERAPY

Treatment by the X-ray is commanding more and more attention and a large variety of conditions are being treated successfully by the X-ray. In my own special field of dermatology, there are but few cases that are not benefitted by X-ray treatment and there is a saying that dermatology made its greatest strides following the improvement of X-ray equipment and the appearance of roentgenotherapy. Needless to say, radiation before and after a surgical excision of cancers has prolonged the life of many cancer sufferers and in some few instances has produced cure. The treatment of enlarged glands has been very successful. Irradiation of the spleen and thyroid have met with success in conditions depending on faulty thyroid metabolism. Asthma, bronchitis and pertussis have been treated by irradiation with rather favorable percentage of improvement.

#### INDIRECT DIATHERMIA IN SINUS INFECTION

The bugbear of the otolaryngologists are the acute and chronic sinus infections. This portion of the head which contains the inferior, middle and posterior meatuses, is of great importance clinically. The sinuses are possessed of low recuperative power and a great variety of symptoms, such as headaches, digestive disturbances, rheumatic fever, eye ache, etc., are caused by the infec-

tion of the frontal, ethmoid and maxillary sinuses. Operative procedures should be done with caution and Ballenger makes a strong plea for rationalism as opposed to radicalism in the treatment of sinus infections. Where there is an empyema of the sinus with no drainage whatsoever, diathermy is contra-indicated. Otherwise, indirect diathermy should be tried, as the results have far surpassed any expectations.

#### CONTINUOUS CURRENTS

Continuous currents have a limited, but definite place. The sinusoidal current is a wonderful substitute for exercise, where exercise is impossible and as a muscle stimulant in enterptosis, paralysis and muscular debility, it stands without a peer.

The Galvanic current is used for its chemical effect only and has a definite diagnostic value. It can be used for the removal of superfluous hair.

To enter into a discussion of other modalities would merely be to confuse a presentation that I have tried to make brief and clear.

#### SUMMARY

##### 1. Why physiotherapy?

- (a) Because physiotherapy has as definite a place in the treatment of injury and disease as the old time-and-tried internal medication and surgical procedure.
- (b) Because it is a hospital necessity, best carried out in a hospital, or office.
- (c) Because it covers all physical measures, heliotherapy, thermotherapy, electrotherapy, hydrotherapy, roentgenotherapy, etc.
- (d) Because, used with common sense and applied with a definite technic and scheme, it gives results that are sometimes startling.

##### 2. Ultra violet ray therapy is of value.

- (a) For its bactericidal effect.
- (b) For its ability to cause changes in the blood and produce an increase in the calcium and phosphorus of the blood and for its ability to cause metabolic changes.

##### 3. The most important electrotherapeutic modality is that of diathermy.

##### 4. Diathermy is most useful medically in:

- (a) Inflammation arising from trauma, local infection, defective metabolism and toxic conditions.
- (b) Conditions of muscular spasm associated with local inflammation with associated impaired function.
- (c) Surgically as an aid in treatment of malignant disease and as a distinct operative procedure.

5. Endothermy is the development of a smooth high frequency current, which permits of cutting tissue without bleeding.

6. Auto-condensation is useful in reducing hypertension.

7. The study of diathermy in pneumonia deserves close consideration because of the results so far obtained.

8. Static current may be used as an alternative with diathermy and while not so valuable, does produce results in neuritis and neurasthenia.

9. Galvanic current. The positive pole has analgesic and haemostatic properties; the negative pole has the ability to soften scar tissue.

10. Sinusoidal current is used to produce exercise of muscles through a stimulation of the motor end plates in the muscles.

11. Roentgenotherapy is most valuable modality for the treatment of cancer, thyroid, spleen, asthma, bronchitis, pertussis, and various dermatologic affections.

12. Hydrotherapy and other physiotherapeutic modalities have not been discussed because of your familiarity with these subjects.

THE JOURNAL  
IS  
YOUR FORUM—  
WE INVITE YOU  
TO UTILIZE  
IT FOR THE  
EXPRESSION OF  
YOUR VIEWS  
ON  
MEDICAL SUBJECTS

# PUBLIC HEALTH ACTIVITIES

*Edited By*

MICHIGAN DEPARTMENT OF HEALTH

## EPIDEMIC OF TYPHOID FEVER IN EATON RAPIDS, MICHIGAN

During December, 1925, an epidemic of typhoid fever in Eaton Rapids, Michigan, which included thirty-five cases and four deaths, was traced to a carrier, a woman over seventy years of age, who had prepared squash for a church dinner at which all the cases were present. The squash was prepared the night before the dinner, warmed over the next morning and mixed through a colander with other squash, the woman doing the mixing with her hands. Without doubt, typhoid organisms were implanted from soiled hands.

At the beginning of December, reports of several cases of typhoid fever at Eaton Rapids were received at the Michigan Department of Health. At the same time several co-eds at the Michigan State College, East Lansing, became ill of the same disease.

When it became known that students of the Home Economics class at the college had visited the woolen mills at Eaton Rapids and, after the inspection, had been entertained by a church organization with a turkey dinner, it was easy to conclude that there was some connection between the two groups of cases and that the dinner was probably responsible.

The water supply of the village on several different occasions was proven to be free of any gross contamination, a sample of the water having been sent to the state laboratory by the city engineer a day or so before November 18, the day of the dinner. Reports at that time showed the city supply as safe for drinking purposes. The three dairies located in the city were investigated and gave no cause for suspicion.

The church dinner, open to the public, was held on November 18 at the Masonic hall and was attended by about 250 persons. Thirty-five cases of typhoid were subsequently traced as having been at the dinner, nineteen of them located in Eaton Rapids, eight in East Lansing, two in Lansing, two in Charlotte, one in Ithaca, one in Lowell, one in a suburb of Chicago and one in Jacksonville, Florida. All of these cases, after attending the dinner, had returned to their homes.

After it was decided that the dinner was the origin of the epidemic, the task of ferreting down the source of contamination and the food in which it was conveyed was undertaken. Three physicians, an inspector and a clerk were

sent to Eaton Rapids by the state commissioner of health.

The investigation lasted ten days. Two hundred seventeen persons, including the cases and contributors of food, out of the two hundred and fifty who attended the dinner were interviewed. Four hundred eighty-three specimens were examined at the laboratory during the course of the investigation.

Thirty-six persons furnished or prepared foods, waited on table, or assisted in the kitchen. All these people were seen and questioned as to the articles of food cooked or prepared in a raw state. Histories were obtained as to previous typhoid fever from these people as well as from members of their families. Printed blanks were used for obtaining this information.

All cases of typhoid originating from the dinner with the exception of four were interviewed. Laboratory confirmations were obtained on all cases with the exception of three, two of which were in other states.

Widals and feces examinations were done on thirty-two of the thirty-six contributors. Repeat examinations were made on all contributors giving a history of typhoid fever. The four contributors from whom no specimens were obtained had merely ordered food by phone from a local grocer and had not attended the dinner.

The carrier was finally traced to an old lady over seventy years of age. This woman had typhoid fever in 1900. Feces and urine showed typhoid organisms on repeat examinations.

The health officer, physicians, owners of the woolen mills and the general public at Eaton Rapids co-operated in the most public spirited way and gave every assistance they could to the officials of the health department throughout the investigation.

## STATUS OF BIOLOGICAL PRODUCTS

The status of biological products for the treatment and prevention of scarlet fever has altered considerably in the last six months. Drs. George F. and Gladys H. Dick received a patent under date of July 28, 1925, which covered the preparation of the products for the treatment and prevention of scarlet fever. This patent was assigned to the Scarlet Fever Committee, Inc., a philanthropic committee, which will manage the licensing of manufacturers under the terms of contracts prepared by the Scarlet Fever committee. The Scarlet Fever



Committee, Inc., will receive certain royalties which will be utilized in maintaining a preventive medicine clinic in the city of Chicago for standardizing the scarlet fever products, as these products have the peculiar property of being specific for man, and have practically no effect on the lower animals. Therefore standardization must be done on individuals who volunteer for or are paid for the job.

Up to date the Scarlet Fever committee has issued only two licenses although others have been applied for and their products are in the process of being investigated by the committee. The E. R. Squibb and Company of New Jersey were issued license No. 1 for the general sale and distribution of these products in the United States. The State of Michigan was issued License No. 2 on January 6, 1926, to manufacture and distribute these products within the state of Michigan. Necessarily, it will be some months before the state is in production so that distribution can be undertaken. Every effort will be made to carry on contemporary investigations to improve the products for the treatment and prevention of scarlet fever.

The use of concentrated scarlet fever antitoxin for the treatment of scarlet fever has been demonstrated as an extremely effective therapeutic measure and is recommended for use by the commissioner of health.

The use of scarlet fever antitoxin in small doses for temporary immunization of contacts is wholeheartedly condemned, for the reason that horse serum immunity lasts only a short period and in the majority of cases the individuals given the prophylactic doses will again become susceptible to scarlet fever before the case in the house has become non-infectious. As there is no definite means of predetermining the exact length of time in which a person will be rendered temporarily immune by the prophylactic dose, this method should be eliminated from the scarlet fever prophylaxis.

Scarlet fever toxin for making individuals more or less permanently immune should be used with great caution as the dosage has not been established with accuracy.

Anti-streptococcus serum, unconcentrated, should not be used under any circumstances as the protein reactions are often more serious than the disease.—C.C.Y.

#### PREVALENCE OF COMMUNICABLE DISEASES FOR YEAR 1925

The tentative report covering the prevalence of Communicable Diseases for the year 1925 must be very satisfactory to anyone who will take pains to study the figures.

The first item, pneumonia, which shows an increase of 1,140 cases is more significant of better reporting than of increased incidence,

but even this advanced figures is considerably below the average for the preceding five years.

There was a slight increase in the number of tuberculosis cases reported both as compared with 1924 and the five year average.

Typhoid fever showed an increase in the number of cases but is still almost twenty-five per cent below the average, 1924 being an exceptionally favorable year for this disease. There have been several small outbreaks in different parts of the state, but prompt and effective action has prevented any widespread epidemics.

Probably the most remarkable showing is found in diphtheria, a decrease of almost 2,100 cases, equivalent to 34.5 per cent as compared with 1924 and is less than one-half of the five year average. There seems to be no question but that the active campaign of education and prevention which has been carried on for the past few years is beginning to bear fruit.

Whooping cough shows a noticeable increase but as this is a disease of marked periodicity this increase was not unexpected. But little can be done to control this disease without the active co-operation of the parents.

Scarlet fever showed a slight decrease from 1924 but an increase of almost 1,000 cases over the five-year average. For the past two years this disease has been very prevalent.

Measles showed a decrease of almost 8,000 cases between 1925 and 1924, but as this is also a disease of marked periodicity, this decrease is not significant except to indicate that we are on the declining side of the curve.

Smallpox showed a very satisfactory decrease from 4,527 cases in 1924 to 784 in 1925. The severe epidemic in Detroit in 1924 did not reappear.

Meningitis indicates simply the report of a few sporadic cases.

Many health authorities were fearful of an epidemic of poliomyelitis in 1925 on account of the unusual incidence in 1924. This, however, did not develop and the number of cases reported were considerably below the five-year average.

Venereal disease showed considerable increase in the number of cases reported, the number being the greatest ever reported in this state. This is not, however, to be taken to mean that there is an increased number of cases but simply that there has been better reporting and when it is considered that a reported case may usually be regarded as a treated case, it indicates that persons are beginning to realize more fully the significance of this disease and the increase of proper medical attention and a decrease of self-medication and lack of treatment.

As a whole, we may conclude that the year 1925 has been a year of satisfactory conditions in the public health of Michigan. Most of those diseases which are amenable to scientific control have been reduced and it is believed that a continuance of active preventive measures will result in still greater reductions.

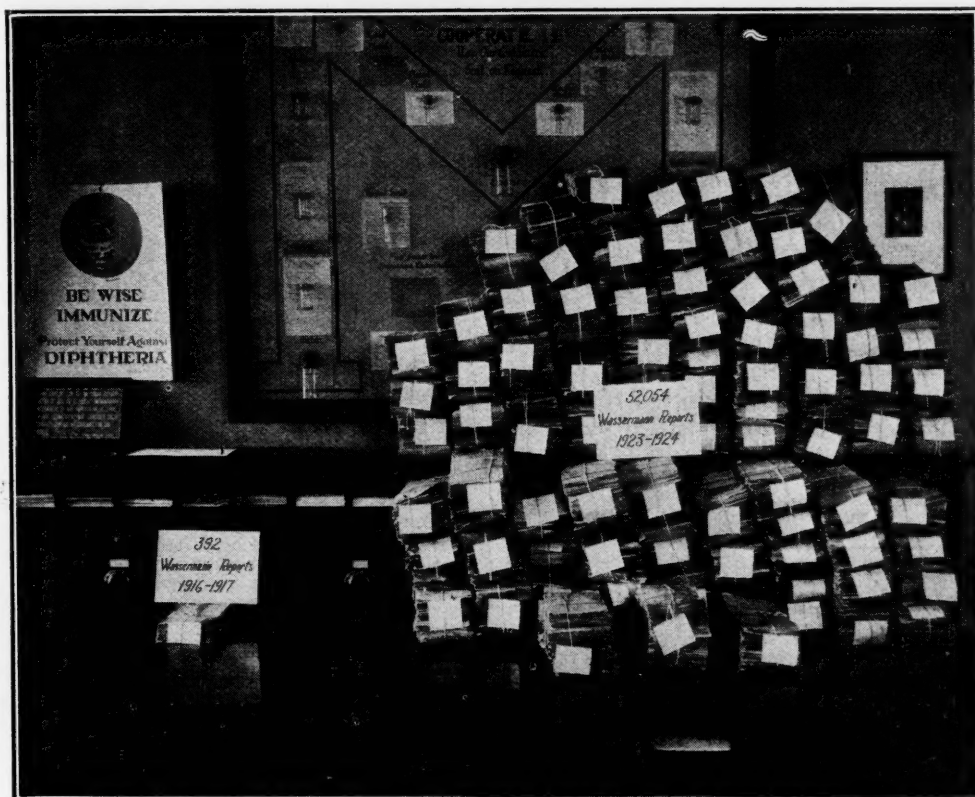
NEW BUREAU OF ORAL HYGIENE AND PREVENTIVE DENTISTRY IN THE STATE  
DEPARTMENT OF HEALTH

At the last meeting of the State Advisory Council of Health held in Lansing, Novem-

himself, but largely through his untiring efforts, oral hygiene among the school children of Flint ranks among the best of any city in the country, and the standard of health has been appreciably raised.

Dr. Davis is preparing extensive plans for the organization of the new bureau, and will need the help and co-operation of both medicine and dentistry in Michigan in making it a great factor in health service for the people of the state.

With the proper co-operation, what Dr. Davis has accomplished in Flint, can in time, be accomplished in Michigan.



Comparison of Wassermann Reports for 1916-1917 with 1923-1924, Made to Michigan Physicians by the Michigan Department of Health Laboratory

ber 18, a new Bureau of Oral Hygiene and Preventive Dentistry was established in the Department of Health.

The general purpose of this new bureau is to promote a better understanding of the relationship of infection in the mouth to general systemic disease, and to educate the public to the necessity of eliminating infection from the mouths of school children for the purpose of raising the standard of health in the public schools.

The department of health can be congratulated in securing as director of this new bureau, William R. Davis, A. B., D.D.S., formerly director of the department of oral hygiene in the Flint board of health. During the past five years Dr. Davis not only made a name for

Since March, 1924, the Michigan Department of Health has been sending certificates of birth registration to parents of all children born in the state of Michigan and accompanying this certificate is a message to parents, giving important points on infant care.

Considerable delay is caused in sending these certificates to the parents, due to insufficient address given on the original certificate sent in by the physician. In fact, some certificates are sent in with only a general address, as Detroit, Michigan or Jackson, Michigan, giving no street and number.

In the month of September, 1925, 7,884 certificates were sent out and 300 were returned marked "unclaimed" and "insufficient address" and this does not include certificates which are

delayed until the physician can be communicated with and the proper address secured.

If the original certificates sent in by the physicians were made out with a complete address, the matter of sending out these birth certificates would be very much simplified and hastened.

The recent cold weather brought repeated inquiries from all sections of the state as to the effect of freezing on antitoxin, toxin-antitoxin mixture, Schick material, and specimens submitted to the laboratory for examination. Freezing does not destroy the antitoxic value of diphtheria antitoxin, provided that when the antitoxin is thawed out, it is thawed slowly enough so that it does not heat up sufficiently to coagulate the serum; in other words, as long as antitoxin is fluid it is potent. Toxin-antitoxin mixture, as prepared by the Michigan department of health, when frozen, does not increase in toxicity. Schick material is satisfactory for use as it retains its original potency. In case the saline freezes and cracks the vial, danger of contaminating the contents is of course eminent.

The one serious interference with laboratory procedure caused by freezing is that freezing hemolyses blood specimens submitted for blood chemistry and serological diagnosis of syphilis. Every effort should be made by physicians to protect samples against freezing during the cold weather of January, February and March.

The following biological products are distributed free of charge by the Michigan Department of Health:

Diphtheria Antitoxin.  
Toxin-Antitoxin.  
Schick Test Material.  
Typhoid Vaccine.  
Silver Nitrate Ampules.  
Neo-Arsphenamine (For Indigent Cases).  
Sulph-Arsphenamine (For Indigent Cases).

The Department keeps in stock a small supply of the following biological products for emergencies:

Antipneumococcic Serum.  
Antimeningococcic Serum.  
Antistreptococcic Serum.  
Dysentery Serum.  
Acne Serobacterin.  
Neisser Serobacterin.  
Proteins.  
Catarrhal Vaccine.  
Human Botulinus Antitoxin "Type A."  
Pollen Extract.  
Influenza Bacterin.  
Tetanus Antitoxin.  
Tuberculin Old "OT".  
Tuberculin Old for Von Pirquet Test (Human and Bovine Types).  
Smallpox Vaccine.

The physicians may purchase these products at cost plus 10 per cent when they are

unable to get immediate deliveries from the biological houses.

#### PREVALENCE OF DISEASE January 1 to December 31, 1925

	Cases Reported		Average 1920-1924
	1925	1924	
Pneumonia .....	5,704	4,664	6,408
Tuberculosis .....	5,785	5,570	5,462
Typhoid Fever .....	959	782	1,232
Diphtheria .....	3,937	6,012	8,921
Whooping Cough .....	7,551	4,364	6,315
Scarlet Fever .....	12,306	12,995	11,346
Measles .....	10,336	18,290	17,185
Smallpox .....	784	4,527	3,470
Meningitis .....	126	157	166
Poliomyelitis .....	96	647	253
Syphilis .....	14,668	13,000	9,436
Gonorrhea .....	10,660	10,490	10,209
Chancreoid .....	104	183	183

#### CONDENSED MONTHLY REPORT

Lansing Laboratory, Michigan Department of Health  
December, 1925.

	+	-	+-	Total
Throat Swabs for Diphtheria .....				1449
Diagnosis .....	59	632		
Release .....	219	204		
Carrier .....	5	210		
Virulence Tests .....	10	20		
Throat Swabs for Hemolytic Streptococci .....				1072
Diagnosis .....	300	386		
Carrier .....	75	311		
Throat Swabs for Vincent's .....	54	826		880
Syphilis .....				5593
Wassermann .....	12	45	1	
Kahn .....	996	4465	65	
Darkfield .....	5	4		
Examination for Gonococci .....	170	1759		1929
B. Tuberculosis .....				473
Sputum .....	100	352		
Animal Inoculations .....	1	19	1	
Typhoid .....				705
Feces .....	61	352		
Blood Cultures .....	7	44		
Urine .....	2	13		
Widal .....	55	169	2	
Dysentery .....				245
Intestinal Parasites .....				21
Transudates and Exudates .....				411
Blood Examinations (not classified) .....				492
Urine Examinations (not classified) .....				390
Water and Sewage Examinations .....				579
Milk Examinations .....				61
Toxicological Examinations .....				5
Autogenous Vaccines .....				4
Supplementary Examinations .....				866
Unclassified Examinations .....				385
Total for the Month .....				15560
Cumulative Total (fiscal year) .....				112081
Decrease over this month last year .....				6727
Outfits Mailed Out .....				12845
Media Manufactured, c.c. .....				383220
Diphtheria Antitoxin Distributed, units .....				21287000
Toxin Antitoxin Distributed, c.c. .....				68620
Typhoid Vaccine Distributed, c.c. .....				1234
Silver Nitrate Ampules Distributed .....				8048
Examinations Made by Houghton Laboratory .....				1235



# The Journal

OF THE

## Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

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**Subscription Price—\$5 per year, in advance**

FEBRUARY, 1926

**Report Malpractice Threats Immediately to Doctor F. B. Tibbals, 1212 Kresge Building, Detroit, Michigan.**

## Editorials

### AN EPOCHAL OCCASION

The beginning of a new chapter was written in the medical history of Michigan by proceedings that were initiated during the Conference that was held in Ann Arbor on Jan. 14. The occasion was the Joint Meeting that was attended by the Council of our State Society, President Little of the university, the members of the faculties of the Medical Department of the University and the Detroit College of Medicine and Surgery, representatives of the state department of health, state board of registration in medicine—and the State Hospital Association.

This meeting was initiated by a suggestion from our president, Dr. Darling, and those in attendance were the guests of President Darling and the Council.

It has long been recognized that these groups, concerned as they are with special features of medical and health work in our state as well as education of individuals and the public, were dealing with inter-related questions and problems. Each impinged and intermeshed with one another to a certain degree. There are common interests and common activities. Each group, however, has heretofore

pursued an individual and somewhat isolated course of procedure.

It was felt that if a Conference could be held at which these several problems of each group might be discussed and a more intimate knowledge be obtained of actual working methods that then some plan would suggest itself whereby a co-operative movement could be instituted that would, by reason of co-operation, enhance and advance the common interests of these groups. That was the real purpose of the meeting.

These objects were set forth at length by Chairman J. B. Jackson and President Darling who opened the discussion. Dean Cabot stated that there was need for co-operation between all of the groups and agencies of the state that were concerned with health and medical problems. He further stated that it was our concern as to what type of practitioners were being turned out by the medical schools and that it was our business to know what the general medical man was doing today, the type of work that was being advanced, the changes that were taking place, what the future field would be. He intimated that it was the obligation of all medical men to direct the policies of all agencies that were concerned with the health and medical care of the public and that we should maintain such close relationship. Dr. Cabot pointed out that the public looks to the profession to keep a high standard of medical practice in our state and that therefore a relationship should be established between the groups of this meeting in order to influence policies, to use facts and to inspire higher degrees of efficiency.

Dean MacCracken told of the work that was being accomplished by the Detroit College of Medicine and Surgery, the service that was being rendered to the profession and intimated that a closer relationship of the two medical schools of Michigan would enable each one to better promote higher medical standards among the graduates.

Ex-President Biddle stated that it was his conviction that the time had arrived for the University of Michigan to give serious thought to providing opportunities to the profession of our State for post-graduate work. He stated that the time had come for the university to come to the aid of those who were desirous of increasing their medical knowledge and to aid those who were desirous of entering a specialty. He was glad that this movement was being initiated by the State Medical Society and was very hopeful that out of this meeting, a unity of action would result to the benefit of the public and profession of our state.

President Little of the University discussed the problem in general and stated that the university was in hearty sympathy with the

needs of all men of Michigan and that as the details became evident, he had no doubt but what sympathetic support and action would emanate from the university authorities. He further advanced three suggestions for consideration: (1) The treatment of the epileptic child that was not feeble-minded. (2) A study of the population problem of the state. (3) Post-graduate work.

Dr. Olin, the state commissioner of health, expressed his view as to the work that would result from this proposed co-operative movement. He stated that his department was opposed to any layman being employed to govern and direct public health work who only possessed the degree of doctor of public health. He stated that those who assumed to serve and direct public health work should be graduates of medicine and should, in addition, possess the degree of doctor of public health. He further stated that he was willing to present to the Council of the Michigan State Medical Society new problems and legislation bearing upon the administration health supervision in Michigan for advice and approval.

Dr. LeFevre, president of the state board of registration, presented the difficulties under which that board was being administered. He likewise cited the tasks that confronted them concerning the work of the internes in our hospitals and stated that the board was anxious to receive the aid and assistance of all medical men and hospital officials for the adoption of a schedule and plan for guidance in its work.

The above represent brief quotations from the remarks that were made. They are sufficient, however, to impart the sentiment that was expressed in this conference and point out the fact that these public men engaged in public service are giving serious thought to the problems and progress of our times. It may be stated as was intimated by President Darling, that this meeting was leading the way to a more desirable understanding on the part of the public and the profession in regard to modern scientific medicine. We are quite confident that from this meeting there will grow a concerted movement that will redound to the honor and credit of our State Society. The meeting therefore was one that marks the opening of a new epoch in Michigan's medical history.

#### COUNCIL MEETING.

This issue contains the minutes of the regular meeting of the Council, held in Ann Arbor on January 14 and 15. Our members are referred to these minutes and are urged to so ascertain the action taken by the Council as it concerned itself with the affairs of our Society. The three sessions that were held were consumed by the listening to the reports of officers and committees which inspired in-

tense, earnest discussion directed toward developing and advancing the work of our organization. Every councilor attended all the sessions. It was indeed heartening to witness the very manifest desire to so supervise and direct the Society's affairs in order that individually and collectively our members might receive the fullest benefits that can be derived from organized effort. He who thinks, will be convinced, after reading these minutes and observing the work as it is being conducted, that the Council is commendably acquitting itself of the responsibilities that have been reposed in that executive body.

Our Post-Graduate Clinical Conferences are achieving results that are of incalculable value. In planning their continuance during this year it is purposed to add features that will arouse added interest and increase their value to every member. The Council directed that the Executive Committee and administrative officers shall take the necessary steps to formulate programs that will reflect and impart the wishes and needs of our members. It is predicted that while a goodly work was accomplished during this past year, that, by reason of the experience gained, these Clinical Conferences will be made so valuable during 1926 that they will command the interest and approval of every member to a far greater degree than did those of last year.

Our Society is in the most prosperous and flourishing state ever revealed in its history. It is meeting its organizational objects in full degree. It is concerning itself with the interests and betterment of its members. No doctor can afford to be un-affiliated. You have every reason to prize your membership for your Society's affairs reflect safe stewardship on the part of your Council.

#### PRESIDENT DARLING

##### Three Score and Ten.

On January 6 our president, Dr. C. G. Darling attained the age of three score years and ten. It is but the privilege of few to check off the years to that number. It is rare that we encounter men attaining that age whose physical and mental faculties permit them to continue in active professional work. Dr. Darling is such a man, daily engaged in active practice that has extended over a period of 45 years.

Little need is there to recapitulate the outstanding qualities that he reveals. He is too well known, beloved and esteemed. We do, however, extend to him the Society's congratulations and good wishes while we append our testimonials to the following that were tendered to him by his immediate co-workers:

To our Beloved Friend and Associate, Cyrenus G. Darling, M. D.:

Two score and four years have passed away since the great Profession of Medicine called you to her standard—forty-four long years of patient effort and brilliant achievement. Today you are singled out of the great honored group of Michigan's surgeons and physicians to bear their banner and represent them as their chief. To us, your colleagues on the staff of St. Joseph's, the honor comes as a personal one. For we know you best, can best appreciate the fitness of the choice, and glory in the tribute. You are a living witness today to every notable advance in the calling we dearly cherish; you are a worthy exponent of all its modern standards and ideals. To few is it given to stand as a link in the chain that unites the old order and the new. That is your proud privilege and we rejoice with you in its glorious realization.

Than we, none know better, that your life as a member of the profession that is honored in calling you son, has been one unbroken span of consecrated service to the suffering ones of God. Your skill, your courage, your life of thought and study have ever been at the call of suffering and distress. Where courage and determination were the factors in the solemn crisis, your hand has never faltered once. Where sacrifice was indispensable, who can say you ever gave a single thought to self? Your life has been shaped on the model of the Master Healer, whose great soul went out in sympathy to suffering and wrecked not that human frailty full oft was the forerunner of disease.

Your life, in its dignity and poise, its unwavering devotion to honor and the right, is full of inspiration to the young disciples of your calling; it is a strengthening example to your confreres of the years.

Tonight the Staff and Sisters of Mercy of Saint Joseph's of Ann Arbor, whom for 15 years you have directed as Counselor and Chief and Father, gladly acclaim the recognition tendered you, happily lay this tribute at your feet, and pray that for a long time yet to come, you may be spared in fullest vigor to direct their destinies who are honored in honoring you.

December 1, 1925:

Michael P. Bourke	Hugh M. Beebe
Mark Marshall	Chalmers J. Lyons
R. G. MacKenzie	Dean W. Myers
R. Bishop Canfield	John A. Wessinger
I. D. Loree	Albert S. Barr
C. L. Washburne	F. R. Waldron
A. C. Furstenberg	George Slocum
H. H. Cummings	Fred L. Arner
A. William Coxon	John L. Gates
A. D. Wickett	Edwin Ganzhorn
G. F. Muehling	E. K. Herdman
Margaret Armstrong	James F. Breakey
Sam W. Donaldson	Sisters of Mercy—by
R. H. Dimock	Sister M. Ursula
T. Klingman	A. H. Pearson

## THE DISTRIBUTION OF PHYSICIANS IN RELATION TO POPULATION— A STATISTICAL SURVEY AND STUDY COVERING TEN YEARS

HARVEY GEORGE SMITH,  
FREDERICK C. WARNSHUIS, M.D.

The question of adequate medical service for the public is being considered in many states. Are there sufficient doctors to give ample service to the people today? Is the old family physician delegated to the past or are we still to be favored with the professional and friendly service that the doctors of this rank have given in the past? Are the physicians congregating in large centers of population and leaving the rural community, the villages and small towns? In several states, particularly in the eastern part of the United States, there is a very marked movement of physicians to larger cities. Is this only a record of the moment, or is it one that will effect all rural smaller towns and cities in the future? In other words, is the rural population, which approximates 46 per cent of the total of the United States, to be without adequate medical service and consequently, the urban population to be oversupplied with medical service? Or, again, are the medical requirements of a physician, established by state law, such that the graduates of medical colleges must be forced to the cities in order to secure sufficient hospital accommodations and remuneration to obtain a fair living and repay the expense of securing their education? These questions are in the minds of educators and sociologists throughout the United States today.

A detailed statistical and geographical study of the physicians in Michigan reveals information that answers some of the questions raised. This study covers the period from 1914 to 1925 inclusive. It includes all counties of Michigan and a complete study in relation to the population of 1914 and 1925.

The following tables supply general information on population of the entire state with Wayne County included. Wayne County is also shown in the same comparative manner as it includes the city of Detroit and is practically an urban county and permits of interesting comparisons.

TABLE 1  
THE ENTIRE STATE INCLUDED

Year	Population	Doctors	Ratio Persons
1925	3,668,412	4,837	1:758
1914	2,810,173	4,180	1:672

TABLE 2  
WAYNE COUNTY EXCLUDED

Year	Population	Doctors	Ratio Persons
1925	2,490,767	2,733	1:911
1914	2,278,582	2,446	1:931



TABLE 3  
WAYNE COUNTY

1925	1,117,645	1,920	1:613
1914	531,590	1,081	1:491

Comparisons of these tables indicate quite clearly that the ratios of doctors to population are in favor of the city. Between Wayne County and the entire state a difference of one hundred forty-five exists for the year 1925 and one hundred eighty-one for 1914. Greater differences exist if comparison is made between tables two and three, showing that doctors as a group outside of the city of Detroit care for 911 or 931 persons whereas in Detroit the relationship is 613 or 491 for the respective years 1925 and 1914.

This question of proportions raises the question of distribution and geographical location of doctors throughout the state. In order to obtain comparative data the cities have been classified into groups; the number of cities of each group with total population and total doctors resident in the various groups. Data on the average ages of the physicians is included also.

As might be expected the largest number of doctors are located in those cities having a population of ten thousand or more and include the city group of the highest total population. In comparing populations and the number of doctors for each group for each period 1914 and 1925 attention is to be given to the fact that in general where populations decrease there follows a decrease in the number of doctors and vice versa where populations increase there is an increase in the number of doctors resident. Under the columns of average ages there is a difference between 1914 and 1925, ages ranging from three-tenths of a year to five and five-tenths. In other words, the age of the doctors practicing medicine in the State of Michigan today is markedly greater than it was in 1914. By consulting table 4 the difference in the average ages of doctors in 1914 and 1925 is noted to be 4.4 years.

And again the lowest average age is found with the cities of ten thousand or more population and the highest, for 1914, in the group of one thousand to two thousand

five hundred and for 1925, in the group of five hundred to one thousand.

TABLE 5

Classification	1914	1925
500 or less	1:233	1:206
500—1,000	1:263	1:270
1,000—2,500	1:344	1:400
2,500—5,000	1:484	1:510
5,000—10,000	1:592	1:633
10,000 and over	1:500	1:564

Rural population which directly affects ratio in first groups not determined (Estimate at least 400 more.)

In table 5 the ratios in relation to city groupings are tabulated. Beginning with the one thousand group classification, 1925 shows that there are less doctors in proportion to population in these groups than there were in 1914. Census data is not available of the rural population that contributes directly to the villages in the other two groupings so that the ratios given represent only the actual village populations. If actual records were obtainable no doubt the ratios in these two groups would average at least four hundred more and the largest populations in proportion to resident physicians would be found in the 1925 column. As has been indicated above there are more doctors in the large cities in proportion to population than in the smaller cities and the villages. Further, the ratio is less to population in 1925 than in 1914. The curves plotted (Fig. 1 and 2) comparing 1914 with 1925 picture graphically the story of the geographical distribution of the doctors in the state. Wayne County is not included in the data used.

At what age are the largest numbers of physicians practicing medicine is a question that naturally follows the data given thus far. In order to secure this information a classification of the number of doctors by age groups was made, which is as follows:

TABLE 6  
DISTRIBUTION OF DOCTORS BY AGE GROUPS

Age Group	Number of Doctors	
	1914	1925
25—29	154	128
30—34	241	240
35—39	357	262

TABLE 4

No. of Cities	Classification	Total Pop. 1914	No. of Doctors	Av. Age	Total Pop. 1925	No. of Doctors	Av. Age
153	500 or less	44,386	190	47.1	47,251	229	50.8
89	500—1,000	68,803	261	47.	68,847	241	52.4
73	1,000—2,500	140,984	410	48.8	131,628	330	52.
22	2,500—5,000	100,270	206	44.7	79,098	157	51.2
26	5,000—10,000	148,521	251	48.	191,584	304	48.3
25	10,000 and over	561,504	1,128	45.7	830,145	1,472	48.
		1,064,468	2,446		1,348,549		

The summary of the ratios of doctors to population for 1914 and 1925 is as follows:

40-44	349	261
45-49	302	379
50-54	211	402
55-59	229	342
60-64	154	198
65-69	109	185
70-74	76	121
75-79	29	54
80 and over	14	40
25 or less	19	14

In order to visualize this information the curves have been plotted and are shown in

doctors in practice in 1914 and in 1925 there were forty. In 1914, there were nineteen doctors twenty-five years old or younger and in 1925 there were only fourteen. These data lead to the questions, has the average age of the doctors increased over the eleven year period? Is the economic condition changed over the period under consideration so that the average doctor is forced to continue in active practice until physically unable or finally, have the requirements of the

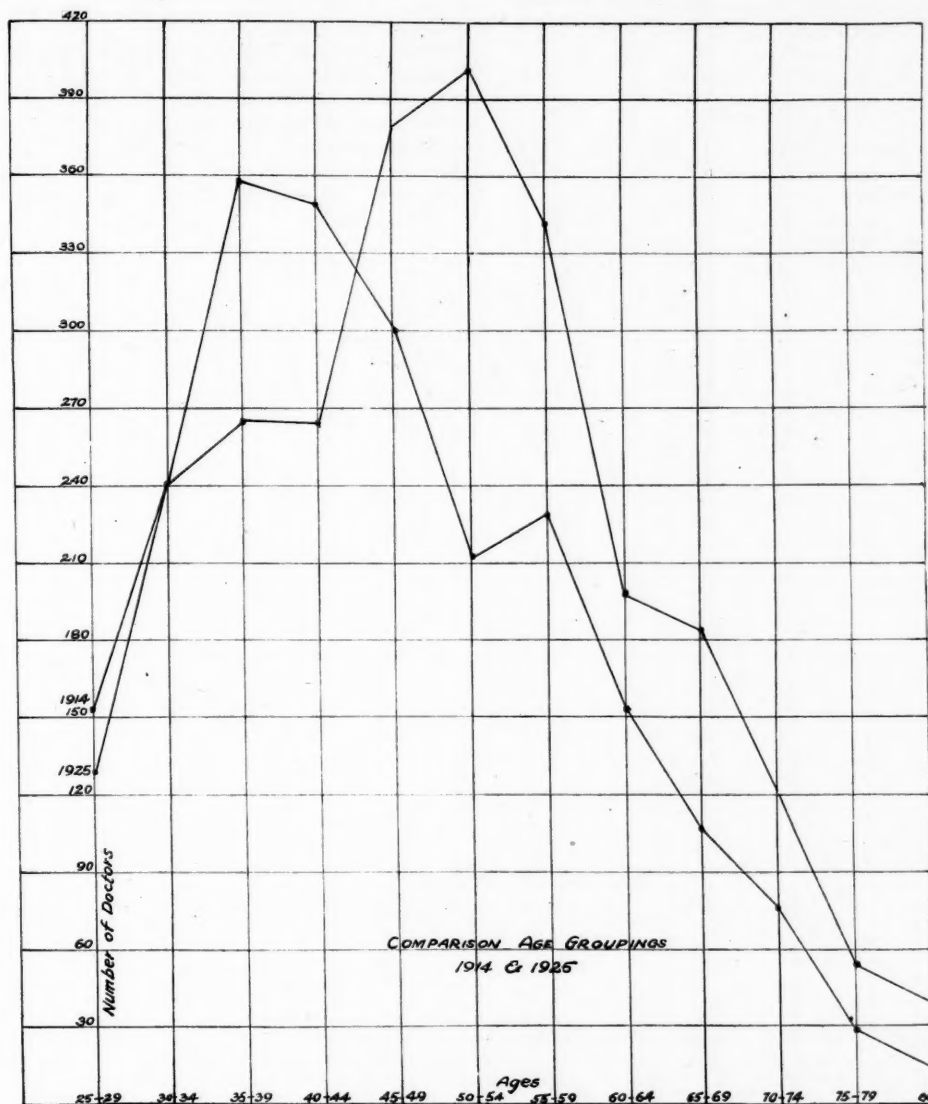


Figure 1

Cut 1. The largest number of doctors for the year 1924 are found to be between the ages of thirty-five and forty-five, while in 1925 the number is recorded between the ages of 45 and 55, there being fifteen years difference in the two high number groups. There are less doctors practicing between the ages of twenty-five and twenty-nine and more in the higher age groupings. At the age of eighty there were fourteen

public, the state law and educational institutions been raised to such a high level that the age averages are naturally increased.

The villages are being deserted by the medical profession of Vermont. Is a similar situation in existence in Michigan. In order to make a study of possible changes the villages of one thousand and less population have been classified by the counties in which located and the number of doctors recorded

for the year 1914 and 1925. The table follows:

TABLE 7  
DISTRIBUTION OF DOCTORS IN VILLAGES OF  
1,000 AND LESS

	1914	1925
Alpena .....	7	8
Barry .....	10	8
Bay-Arenac .....	17	14
Benzie .....	7	7
Berrien .....	5	6
Branch .....	1	.....
Calhoun .....	8	8
Cass .....	9	5
Charlevoix-Antrim-Emmet .....	9	9
Chippewa .....	3	3
Clinton .....	7	5
Delta .....	6	6
Dickinson-Iron .....	1	1
Eaton .....	17	11
Genesee .....	19	20
Gratiot-Isabella-Clare .....	18	18
Gogebic .....	4	5
Grand Traverse-Leelanau .....	8	6
Hillsdale .....	26	16
Houghton .....	10	11
Huron .....	7	7
Ingham .....	14	11
Ionia-Montcalm .....	23	27
Jackson .....	17	14
Kalamazoo .....	26	21
Kent .....	20	21
Lapeer .....	19	11
Lenawee .....	12	8
Macomb .....	19	15
Manistee .....	6	6
Marquette-Alger .....	7	5
Mason .....	7	5
Mecosta .....	11	9
Menominee .....	7	6
Midland .....	3	3
Monroe .....	15	11
Muskegon .....	7	4
Newaygo .....	9	7
Oakland .....	12	14
Oceana .....	3	2
O.M.C.O.R.O. ....	12	6
Ontonagon .....	5	6
Osceola-Lake .....	4	3
Ottawa .....	17	17
Saginaw .....	11	9
Sanilac .....	17	19
Schoolcraft .....	.....	.....
Shiawassee .....	14	6
St. Clair .....	6	5
St. Joseph .....	12	8
Tri .....	18	11
Tuscola .....	17	17
Washtenaw .....	13	8
Total .....	572	489

Thirteen counties show an increase in the number of doctors, twenty-seven show a decrease and twelve show no change over the eleven year period. There were five hundred seventy-two doctors resident in these counties in 1914 and only four hundred eighty-nine in 1925. This comparison clearly indicates that there are less doctors practicing medicine in the villages of Michigan of one thousand and less population than there were in 1914. The number of villages that had no doctors in 1925 is twelve and the

number of villages that had no doctors in 1914 but had doctors in 1925 is three. Consult tables 8 and 9 below for the names of the villages and their location by counties. The villages without resident physicians are located within ten miles of larger centers with one exception, Baldwin which shows a marked decrease in population. It is twenty miles from the nearest resident physician.

TABLE 8  
VILLAGES WITHOUT RESIDENT DOCTORS 1925

Alto—Kent County.  
Weston, Jasper, Tipton—Lenawee County.  
Diorite, Trenary—Marquette County.  
Stanwood, Millbrook—Mecosta County.  
Montague—Muskegon County.  
Baldwin—Osceola-Lake Counties.  
Brant—Saginaw County.  
Bancroft—Shiawassee County.  
Total, 12.

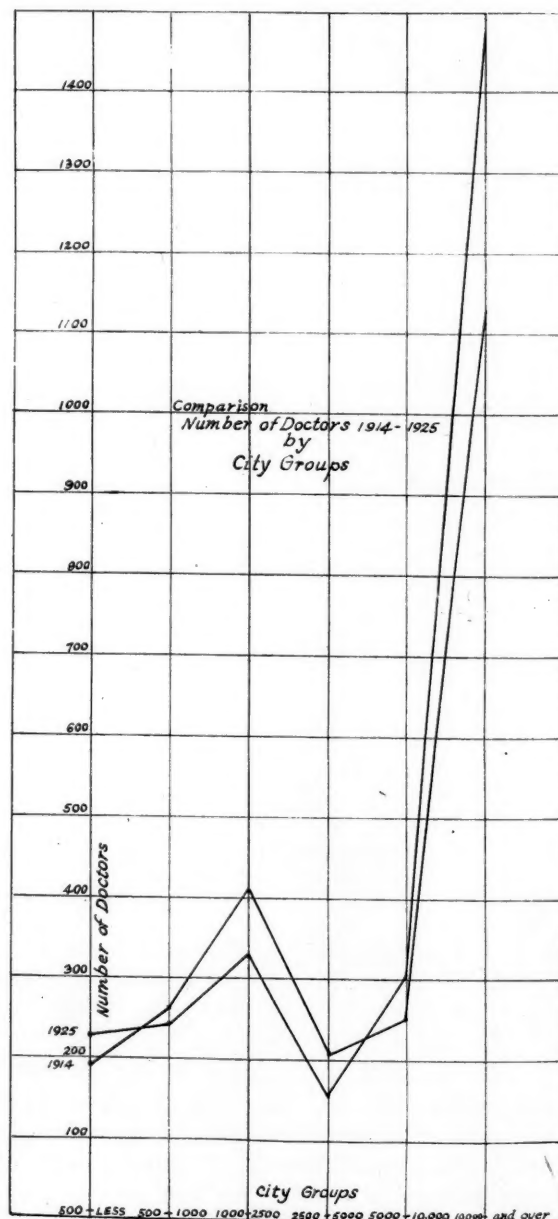


Figure 2



TABLE 11

County	Number Doctors		Incr'se Over 1914	Decr'se Over 1914	Population		Increase Over 1914	Decrease Over 1914
	1914	1925			1914	1925		
Alpena .....	26	22	....	4	36,917	34,912	.....	2,005
Barry .....	28	23	....	5	22,633	21,383	.....	1,250
Bay .....	92	84	....	8	68,238	69,549	1,311	.....
Benzie .....	10	9	....	1	10,638	6,947	.....	3,691
Berrien .....	63	60	....	3	62,653	53,622	.....	9,031
Branch .....	31	28	....	3	25,605	23,997	.....	1,618
Calhoun .....	121	134	13	....	56,638	72,918	16,280	.....
Cass .....	30	20	....	10	20,624	20,395	.....	229
Charlevoix-Emmet .....	49	36	....	13	53,410	32,970	.....	20,440
Chippewa .....	35	34	....	1	24,472	24,818	346	.....
Clinton .....	23	18	....	5	23,129	23,110	.....	19
Delta .....	28	28	....	....	30,108	30,909	801	.....
Dickinson-Iron .....	26	26	....	....	35,688	41,563	5,875	.....
Eaton .....	43	34	....	9	30,499	29,377	.....	1,122
Genesee .....	89	141	52	....	64,555	125,688	61,133	.....
Gogebic .....	22	24	2	....	23,333	33,225	9,892	.....
Grand Traverse .....	26	26	....	....	23,784	19,518	.....	4,266
Hillsdale .....	40	35	....	5	29,673	28,161	.....	1,512
Houghton .....	53	45	....	8	94,145	79,592	.....	14,553
Huron .....	16	16	....	....	34,758	32,786	.....	1,972
Ingham .....	91	136	45	....	53,310	81,554	28,244	.....
Ionia-Montcalm .....	78	59	....	19	33,550	33,087	.....	463
Jackson .....	80	100	20	....	53,426	72,539	19,113	.....
Kalamazoo .....	134	154	20	....	60,427	71,725	11,298	.....
Kent .....	232	296	64	....	159,145	183,041	23,896	.....
Lapeer .....	28	25	....	3	25,782	26,033	.....	251
Lenawee .....	62	51	....	11	47,907	47,767	.....	140
Macomb .....	49	52	3	....	32,606	38,103	5,497	.....
Manistee .....	18	16	....	2	26,688	20,899	.....	5,789
Marquette-Alger .....	48	44	....	4	46,739	45,786	.....	953
Mason .....	17	18	1	....	21,832	19,831	.....	2,001
Mecosta .....	26	17	....	9	19,466	17,765	.....	1,701
Menominee .....	16	14	....	2	25,648	23,778	.....	1,870
Midland .....	9	8	....	1	14,005	17,237	3,232	.....
Monroe .....	20	29	9	....	32,917	37,115	5,198	.....
Muskegon .....	45	69	24	....	40,577	62,362	21,785	.....
Newaygo .....	10	12	2	....	19,220	17,378	.....	1,842
Oakland .....	77	106	29	....	49,576	90,050	40,474	.....
Oceana .....	9	12	3	....	18,379	15,601	.....	2,778
O.M.C.O.R.O. ....	24	18	....	6	25,419	23,999	.....	1,420
Ontonagon .....	8	9	1	....	8,650	12,428	3,778	.....
Osceola-Lake .....	14	8	....	6	22,828	19,658	.....	3,170
Ottawa .....	44	45	1	....	45,301	47,660	2,359	.....
Saginaw .....	95	91	....	4	89,290	100,286	10,996	.....
Sanilac .....	19	19	....	....	33,930	31,237	.....	2,693
Schoolcraft .....	5	5	....	....	8,681	9,977	1,296	.....
Shiawassee .....	34	35	1	....	33,246	35,924	2,678	.....
St. Clair .....	67	72	5	....	52,341	58,009	5,668	.....
St. Joseph .....	33	31	....	2	25,499	26,818	1,369	.....
Tri County .....	32	24	....	8	38,472	32,788	.....	5,684
Tuscola .....	35	26	....	9	34,913	33,320	.....	1,593
Washtenaw .....	155	209	54	....	44,714	49,520	4,806	.....
Gratiot-Isabella-Clare .....	45	48	3	....	51,849	56,524	4,675	.....
			343	164	2,278,582	2,490,767		

## SUMMARY

22	Counties show	decrease	number of	doctors and	decrease in	population
17	"	"	increase	"	"	"
3	"	"	"	"	"	decrease
5	"	"	decrease	"	"	"
3	"	"	no change	"	"	"
3	"	"	"	"	"	decrease

53

Total increase ..... 343 doctors  
 " decrease ..... 164 "  
 Net change ..... 179 "  
 Increase in population, 212,185.

TABLE 9  
VILLAGES HAVING DOCTORS IN 1925 AND  
NOT IN 1914

Villages having doctors in 1925 and not in 1914.  
Clawson—Oakland County.  
Bergland—Ontonagon County.  
Deford—Tuscola County.  
Total, 3.

A general and detailed picture of Michigan by counties showing the number of doctors, populations and increases and decreases is found in Table 11.

The above data does not include Wayne County. The net summary of the table indicates that there has been an increase in the number of doctors, namely one hundred seventy-nine. There has been a net increase in population totaling 212,185. Where ever there has been a marked increase in population a marked increase in the number of doctors is recorded and vice versa where there has been a marked decrease in population there follows a marked decrease in resident physicians. There appears to be no definite indication of direction of movement where the change is not appreciable. This condition may exist, due to the fact that a so-called point of sufficient service has or has not been attained. Those counties that show marked increases are, Calhoun, Genesee, Ingham, Jackson, Kalamazoo, Kent, Muskegon, Oakland, Saginaw. Those showing marked decreases are, Antrim, Charlevoix, Emmett and Cheboygan, Houghton and Barga, Manistee, the group in the central northern portion including six counties, Otsego, Montmorency, Crawford, Oscoda, Roscommon and Ogemaw, Osceola-Lake, Wexford, Kalkaska and Misaukee. The term marked increase or decrease is variable with the population, in most instances it ranges from five to forty thousand where there are increases and from fifteen hundred to twenty-one thousand where there are decreases.

#### CONCLUSIONS

The following conclusions appear to have facts warranting their assumption:

1. There is one doctor to 911 people in the state and one to 613 in Detroit. Evidencing no great deficiency of medical men.
2. There are a less number of doctors in rural hamlets, while there is an increase of doctors in towns of population from 2,500 to 10,000 or more. It may be assumed that by reason of the automobile and improved roads medical attendance is as attainable, if not more so, than in 1914.
3. The average age of the doctor has increased—the greater number is between 45 and 55. Educational training consumes more time and can be credited for this fact.
4. There is a normal natural increase in

the number of doctors and well conforms to population increase. The ratio of doctors to population conforms to population changes.

5. Michigan is not suffering from lack of doctors, nor is their availability hampering or inconveniencing the people.

6. The young doctor chooses the village for his field of service proportionately as readily as the city, providing there is a reasonable assurance of a fair living and remuneration to repay expenses incurred in securing his training.

#### ANNUAL MEETING

In December there was mailed to each member a referendum requesting the recording of desires as to what type of a program should characterize our annual meeting and also whether our annual meeting should be held in the spring or fall of the year. We impart the following tabulation of the cards returned:

##### RESULT OF REFERENDUM VOTE:

Number of cards returned.....	1,133
The vote by propositions—	
Proposition 1. I vote for the holding of a One Day of Section meetings and One Day of General Scientific meetings.....	404
Proposition 2. I vote for the re-establishing of separate Section Meetings for the two days of the Annual Meeting as has been customary in the past.....	184
Proposition 3. I vote for the holding of combined General Scientific meetings on the two days of the Annual Meeting as was carried out at the Muskegon, 1925, meeting.....	568
Proposition 4. I vote for the holding of the Annual Meeting: In the fall.....	599
In the spring.....	455
Blank Votes .....	21

Guided by this expression on the part of members interested in recording their desires, the Council has determined to perfect the following arrangements for our 1926 annual meeting: 1. That Lansing be the place of meeting provided that the assurance is obtainable that the new hotel will be able to provide accommodations. 2. The dates to be Sept. 14, 15 and 16. 3. The scientific program to afford one-half day for section meetings and three general clinical meetings.

#### REPORT ON COURSES WHICH MIGHT BE GIVEN BY COLLEGES AND UNI- VERSITIES IN ORDER TO GIVE WOMEN AN ELEMENTARY KNOWLEDGE OF THE CARE OF THE SICK

This report grew out of a report made by this Committee to the last meeting of the Joint Committee on Public Health Education bearing upon the available supply of nursing service in the state of Michigan. From that report it appeared that the available supply of

nursing service was considerably below the demand and it appeared probable that no very extraordinary increase in the supply of such service was to be expected. It is widely believed that a good deal of the nursing service now desired might be eliminated if the women of the community were more familiar with the milder manifestations of illness and the care of persons not seriously ill. Obviously such a suggestion touches the problem of the general education of women.

President Little has pointed out on various occasions that the general scheme for the education of women in colleges and universities has been developed along lines entirely similar to those made for the education of men. It seems at least reasonable to believe that if the present plan of college education is sound for men it is probably not sound for women except in those cases where they plan to continue their studies in professional fields and compete on equal terms with men. Without venturing any opinion as to the differences which may exist between the minds of men and women, it seems fairly certain that important differences do exist and should be taken into account. This proposition, of course, involves two other propositions if a differentiation of the curriculum is to be made: one concerning itself with methods of approach and presentation, the other concerning itself with subject matter.

No matter what the future may develop as to the share of the world's work which is done respectively by men and by women, it may be confidently asserted that women will continue to be in close contact with sick people—especially with children to a considerably greater extent than men. From this it would appear to follow that their general training might well include a broader knowledge of the origin, nature and behavior of mankind, both in health and in disease, than would be necessary for the average man. Such training cannot, we think, wisely be undertaken in the school years and more properly belongs in the work of colleges and universities leading to the degree of "Bachelor of Arts."

Courses planned to meet this need should include (1) a broad course in the structure and function of the human body, being a survey of the subjects of anatomy and physiology; (2) a course covering the principles of physics and chemistry; (3) a course in hygiene and sanitation; and (4) a considerable course in the elementary care of the sick. This latter course can, we think, be given only in a general hospital and should consist chiefly of demonstration and practical work in contact with the sick.

In addition to these courses there might well be offered, perhaps as electives, one course dealing with the principles of hered-

ity and genetics and one dealing with the development of manners and customs and touching upon the causes of human behavior. These courses will need to be taught exceptionally well if they are to produce the desired result and will occupy perhaps one-fifth to one-sixth of the hours now required for the degree of "Bachelor of Arts."

It appears to us important that all of the four specified courses should be given if any step is to be taken in this direction, the first three courses constituting only the foundation upon which the more important course in the elementary care of the sick is based. This course cannot be safely or satisfactorily given without some foundational knowledge as a basis but is the real goal toward which this plan is headed. We do not think that this final course can be satisfactorily taught outside of a hospital and this will, therefore, require colleges and universities undertaking this work to effect some affiliation with a general hospital in those cases in which they have no satisfactory hospital under their own control.

In order to show in more detail the ground which we think these courses should cover, a somewhat fuller statement of them is appended.

Course 1—"The Structure and Function of the Human Body;" four hours. This course should cover the essential features of human anatomy and physiology. It should present some discussion of histology and embryology and in the field of gross anatomy, should deal with larger, rather than finer structures. For instance, in the teaching of anatomy of bones and muscles, only the larger groups should be dealt with. The course should be profusely illustrated with models, lantern slides, etc. It should be completed in one semester and require no laboratory work.

Course 2—"Principles of Natural Science;" four hours. This course should survey in general terms the fields of chemistry and physics. It need not be required of students who have taken courses in either of these subjects in the college or university. Like Course 1, it should attempt to deal with broad general principles in the fields of physics and both organic and inorganic chemistry. The teaching should be lectures profusely illustrated, and by demonstrations.

Course 3—"The Principles of Health and Sanitation, General and Special;" three hours plus two hours. This course should cover the field commonly referred to as "hygiene." Here should be included elementary bacteriology, a discussion of food, dress, exercise and probably first aid. A definite



amount of time should be devoted to the principles of sanitation including ventilation, sewage disposal, etc. The teaching in this part of the course should be by illustrated lectures and demonstrations.

The portion of this course to which an additional two hours has been assigned should deal with what may be called "special hygiene;" namely, such portions of the field of hygiene as are most essential to women. This should deal with the questions of pre-natal hygiene, post-natal hygiene and the hygiene of children, in which latter field some discussion of the more common diseases of children should be introduced.

Course 4—"The Elementary Care of the Sick;" six hours. The purpose of this course is to give an elementary knowledge of the care and management of illness in the home. It should discuss such questions as the proper surroundings for the sick, the early recognition of the common symptoms of illness, food for the sick and the care of the more common ailments, particularly those of children and the aged. It should aim to give a knowledge of simple nursing procedures and first aid treatment such as can be satisfactorily given at home. It should be taught by the staff of the Nursing School and given at the hospital.

Elective Courses: 1—"Man;" two hours. This course should undertake to deal with the principles of heredity and genetics as they are essential to a sound knowledge of human development and behavior. It should attempt in a brief period to lay a foundation in these subjects without pursuing them in great detail.

2—"A Course in Human Behavior;" two hours. This course should introduce some of the topics ordinarily considered under anthropology and ethnology but only in very general form. It should also invade part of the field now covered in some of the courses in psychology dealing with human instincts as they effect human behavior. It should be taught by lectures.

Throughout this description of courses the phrase "hours" refers to "semester hours" as this term is ordinarily used in the catalogues of colleges and universities. It should be understood that a "semester hour" means one hour of lecture, demonstration or quizz and that two hours, and occasionally three hours, of laboratory work are required to fulfill the requirements of one semester hour. This would become important only in the course dealing with the care of the sick since in that course there would be considerable practical work and considerably

more than six hours a week of actual time would be involved.

Hugh Cabot,  
W. T. Dodge,  
F. C. Warnshuis.

#### ENLARGED PROGRAM FOR MATERNAL WELFARE

The Joint Committee on Maternal Welfare, representing the American Association of Obstetricians, Gynecologists and Abdominal Surgeons, the American Gynecological Society and the American Child Health Association, has organized a nationwide propaganda to present the appeal for better obstetrics, more definite pre-natal care and rigid asepsis. The committee is about ready to launch the year's work for 1926, and hopes to present a program on maternal welfare in every Medical Society in the state.

There is to be a group of lecturers whose names are to be given by the state chairman to the secretary of the State Society, from whom secretaries of district and county societies may obtain information and upon request a speaker will be furnished for any meeting.

Originally, it was planned to include in the Joint Committee, representatives of the Section of the A. M. A. on Obstetrics, Gynecology and Abdominal Surgery, but owing to the annual change in the personnel of the officers, and to the fact that no provision can be made for the financial support of a committee, this was thought by the officers of the section to be impracticable. The organization of the committee is now comprehensive throughout the country, and is already beginning to function in an effective manner.

One of the most vital problems which the profession must solve is that of the early reduction of the risk rate to mother in childbirth. There can be no question as to where responsibility lies for the vast majority of cases of puerperal sepsis and eclampsia, which are the two outstanding elements in maternal morbidity and mortality. It lies largely with the medical profession itself. The remedy for this condition is to be found, also, within our own ranks and can be expressed in one word—education.

It is believed that the program outlined by the joint committee will reduce by fifty per cent our risk rate to mothers in childbirth.

G. Van Amber Brown, M. D.,  
Chairman of the State Committee.

#### *Editorial Comments*

Yes, your 1926 dues are payable. Send your check to your County Secretary today.

The Congress of the College of Physicians that is to hold its Clinical Meeting in Detroit this month brings to our very door an opportunity for gaining personal profit. If in any way possible we urge that you attend these Clinical Meetings.

We direct your attention to the article in this issue which imparts a statistical study of the distribution of doctors in Michigan. The tables cover a ten year period and reflect some very interesting facts. We felt that this study would intelligently answer the much worn out cry of lack of doctors in rural communities. As far as Michigan is concerned we feel that no community is without satisfactory and fairly available medical protection.

We are advised to withhold making income tax returns until the reductions proposed are enacted. Officers of the American Medical Association are aggressively active in the endeavor to secure allowances for physicians for expense entailed in attending medical meetings, post-graduate study, etc. We advise that you watch the Journal of the A. M. A. for the latest authentic advice and rulings, which the Editor promises to impart as soon as action becomes official.

Our minimum program for County Societies has been adopted by practically every county unit. Its value has attracted the attention of other states. Our concern now is that it be carried out to its fullest limits. This means work by officers and program committees. Is this work being carried on in your county? There should be no hesitancy or delay. Start now and keep going. Your Society will profit and your members will exhibit increased interest. Here is an opportunity for real achievement.

Moynihan, in his recent revised work on abdominal operations imparts the following pertinent conclusion: "Surgery today is being practiced by too many light-hearted and incompetent surgeons, who have neither sought in due service, to acquire a mastery of their craft, nor have learned, from experience gained by long association in hospital work, when an operation should be done, when left un-done, how made safe, how made to fall lightly upon a patient already afflicted, it may be, by mental, no less than physical distress. Of all the temples in the world none is more sacred than the operation theatre." It is well to ponder over this thought.

The Journal will gladly place at the disposal of our members the information it possesses as to safe financial investments. In this day there exists an army of stock and bond salesmen who endeavor to sell securities of every type. It is difficult to determine the sound, safe investments. It is very easy to fall for worthless bonds, or those of but fourth or fifth rate value. Excellent opportunities present for safe and profitable purchases. Doctors are known to be careless when it comes to investing their surplus funds. Other physicians, overly cautious, are receiving very low interest rate returns whereas their interest earnings may readily be doubled by re-investment in securities that are sound and paying larger rates. The Journal seeks to serve its readers in making available dependable investment advice.

The question of public education by means of newspaper publicity is receiving serious thought by the Council, the Joint Committee and representatives of the University. Just which, if any plan, will be adopted, we cannot state at this time. As imparted, in a previous issue, Texas is engaged in an advertising plan, which, however, calls for expenditure of considerable funds. Indiana has been pursuing a course of releasing to the press prepared reading articles. New York has newspaper releases. Illinois is conducting meetings, educational exhibits, etc. What is the most effective means is difficult to determine. It would be extremely ill advised to initiate such an educational movement unless a well thought out plan is adopted. Discussion is invited and we will welcome your aid in solving the question.

The Tenth Annual Congress on Internal Medicine will be held at Detroit and Ann Arbor, week of February 22-27, 1926.

The Congress is devoted to amphitheatre, bedside and clinical laboratory demonstrations as well as to symposia dealing with modern phases of internal medicine. Distinguished guests from abroad, Canada and the leading clinics of the United States will occupy prominent places on the program. Four days will be devoted to the work at Detroit and on one day, the Society will be the guest of the University of Michigan at the newly opened eleven hundred bed University Hospital.

All physicians, who are interested in internal medicine and who are members in good standing of their local and national societies are cordially invited to attend the Congress.

Hotel headquarters will be at the Book-Cadillac in Detroit. Information regarding reduced railroad rates, program, hotel accommodations, etc., may be secured from the Secretary-General.

Mal-practice threats, causing claims and suits, are the bane of professional existence, but also injuring his reputation and business in his community and brings the entire profession into disrepute.

The situation regarding this condition of so-called blackmail, has assumed alarming proportions and history in these matters indicates no reduction in 1925, but rather a further increase. Thus denoting that it is important that some immediate action be taken.

The first necessary step, which will undoubtedly be the quickest to furnish relief, is through co-operation between professional men themselves, the Medical Legal Committee of our Society and the Insurance Organizations dealing in Mal-practice Indemnity and Defense. Through this co-operation can be, in a very high degree, eliminated a large majority of such claims and suits.

The first important step in this co-operation consists of prompt notice to our Medical Legal Committee and the Insurance Company, advising of any event or occurrence arising that may lead to a claim or suit. Such notice to be followed by "immediate investigation" of the facts. Thus by "being on the ground early" can be ascertained the true facts for use as conclusive evidence in the event of trial of a case in court or the compromise of same. If purely blackmail, then prompt attention should be taken to arrest such blackmail.

Co-operation of this character will undoubtedly exercise a most beneficial effect upon the entire situation.

# Official Minutes of the Midwinter Session of the Council, Michigan State Medical Society Held at Ann Arbor, Jan. 14 and 15

## FIRST SESSION

The first session of the midwinter meeting of the Council of the Michigan State Medical Society was called to order in the Michigan Union, Ann Arbor, at 3 p. m., on January 14, 1926, by Chairman Jackson. There were present Councillors Ricker, Jackson, Stone, Bruce, Randal, LeFevre, Burke, Charters, Green, Powers, Corbus, Van Leuven, MacKenzie, Burke, the president of the State Society, C. G. Darling; Executive Secretary, Harvey George Smith, and Secretary-Editor, F. C. Warnshuis.

1. The minutes of the last meeting of the Council were approved as read.

2. The Secretary presented his Annual Report, which was as follows:

### SECRETARY-EDITOR'S 1925 ANNUAL REPORT

To the Council,

Michigan State Medical Society.

Gentlemen: As your Secretary-Editor, I am submitting the following as my annual report for the fiscal year, ending December 31st, 1925.

### FINANCE

The following is the certified audit of the Society's financial condition:

January 4, 1926.

To the Council of the Michigan State Medical Society,

Dr. F. C. Warnshuis, Secretary,  
Grand Rapids, Mich.

Gentlemen: Pursuant to request, we have audited the books of account and record of the Michigan State Medical Society for the period from December 1, 1924, to December 26, 1925, and submit herewith our report.

The scope of our examination consisted of a verification of the assets and liabilities of the Society at December 26, 1925, as well as a comprehensive test check of the recorded cash transactions, operating accounts, and other records for the period named as commented more fully upon throughout the text of this report.

The assets and liabilities at December 26, 1925, are set forth below in condensed form and compared with those at November 30, 1924:

### ASSETS

	Dec. 26 1925	Nov. 30 1924	Increase Decrease
Cash .....	\$ 386.00	\$ 15.97	\$ 370.03
Accounts Receivable .....	1,600.34	1,386.21	214.13
Securities Owned .....	8,750.00	4,000.00	4,750.00
	<u>\$10,736.34</u>	<u>\$5,402.18</u>	<u>\$5,334.16</u>

### LIABILITIES

Accounts Payable .....	\$ 102.17		\$ 102.17
Advance Payments .....	397.05	73.25	323.80
Due to Defense Fund ..	31.00	199.50	168.50
Net Worth .....	10,206.12	5,129.43	5,076.69
	<u>\$10,736.34</u>	<u>\$5,402.18</u>	<u>\$5,334.16</u>

Cash on Deposit at December 26, 1925, was verified by direct correspondence with the depository bank. We traced the recorded cash receipts, for the period under audit directly to the bank account and thoroughly tested the disbursements therefrom by examination of officially signed cancelled bank checks, invoices or other data on file.

The total of Accounts Receivable at December 26, 1925, was proved by trial balance of the individual accounts, but it was not deemed practicable to attempt to verify the accuracy of the book records by corresponding with the recorded debtors. As part of our work, we analyzed these unpaid balances as to date of charge and have classified them as follows:

Month of Charge	For Reprints	Professional Announce- ments	For Adver- tising	Total
December, 1925.....	\$26.50	\$343.45	\$ 702.03	\$1,071.98
November, 1925.....			27.50	27.50
October, 1925.....			29.00	29.00
September, 1925 ..			32.00	32.00
July, 1925.....			32.00	32.00
August, 1925.....			32.00	32.00
Prior to July 1, 1925 .....		137.50	238.36	375.86
Total .....	\$26.50	\$480.95	\$1,092.89	\$1,600.34

The Securities Owned, which are stated at cost, were verified by inspection.

Full provision has been made, as far as we could ascertain, for all known liabilities of the Society at December 26, 1925.

In accordance with the previous policy of the Society, unpaid dues or subscriptions at December 26, 1925, have not been set up as assets, but will be taken into income when received.

The expenditures for office furniture and fixtures during the current period have been charged against expense, as it has been the policy of the Society not to maintain an asset account for such items.

We have prepared and submit as a part of this report a Statement of Income and Expense for the fiscal period ended December 26, 1925.

WE HEREBY CERTIFY that we have audited the books of account and record of the Michigan State Medical Society for the period from December 1, 1924, to December 26, 1925, as herein outlined, and that, in our opinion, based upon the records examined and information obtained, the accompanying Statement of Assets and Liabilities is drawn up so as to set forth the correct financial condition of the Society at the date named, and that the relative operating statement is correct.

Very truly yours,

ERNST & ERNST.

(SEAL)



STATEMENT OF ASSETS AND LIABILITIES  
MICHIGAN STATE MEDICAL SOCIETY

December 26, 1925

## ASSETS

CASH—			
On Deposit—The Old National Bank.....\$	386.00		
ACCOUNTS RECEIVABLE—			
For Reprints .....	\$ 26.50		
For Professional Announcements .....	480.95		
For Advertising .....	1,092.89	1,600.34	
SECURITIES OWNED—			
United Light & Power Company 5½%—1959 .....	\$2,000.00		
Federated Utilities Company 6%—1945 .....	2,000.00		
Community Power & Light Company 6½%—1933 .....	2,000.00		
Hudson Valley Coke & Products Corporation 7%—1930 .....	1,000.00		
Government of the Argentine Nation 6%—1959 .....	1,000.00		
National Electric Power Company 6%—1945 .....	1,000.00		
	\$9,000.00		
Less: Allowance to Reduce Cost .....	250.00	8,750.00	
		\$10,736.34	

## LIABILITIES

For Expenses .....	\$ 102.17		
ACCOUNTS PAYABLE—			
ADVANCE PAYMENTS—			
For Reprints, Advertising and Dues.....	397.05		
DUE TO LEGAL DEFENSE FUND—			
For Dues Collected.....	31.00		
NET WORTH—			
Balance—Dec. 1, 1924.....	\$5,129.43		
Net Income—Operation for the Period from Dec. 1, 1924, to Dec. 26, 1925.....	5,076.69	10,206.12	
		\$10,736.34	

(NOTE A)—This Statement is subject to the comments contained in our "Certificate" included in and made a part of this report.

## INCOME AND EXPENSE

## MICHIGAN STATE MEDICAL SOCIETY

For the Period from December 1, 1924, to  
December 26, 1925

## INCOME—

Journal Subscriptions and Sales .....	\$ 7,645.95		
Reprint Sales .....	1,119.16		
Advertising Sales .....	7,856.84		
Professional Announcements.....	705.68		
Membership Dues .....	16,512.95		
Interest from Investment Bonds .....	527.05		
Profit on Sale of Investment Bonds .....	200.00		
Sundry Accounts Written Off .....	2.25	\$34,569.88	

## EXPENSES—

Journal Expense .....	\$11,064.79		
Reprint Expense .....	1,289.65		
Council Expense .....	740.73		
Expense of Delegates to A. M. A. ....	402.92		
Annual Meeting—Net .....	870.68		
Post Graduate Conferences.....	3,316.64		
Legislative Expense .....	173.71		
Executive Secretary .....	5,281.80		

Editor's Salary .....	3,225.00		
Stenographer .....	1,526.50		
Postage and Stationery.....	225.00		
Office Rental and Expense.....	615.99		
Sundry Society Expense.....	759.78	29,493.19	

NET INCOME .....\$ 5,076.69

It is a pleasure to report an increase in our present worth to \$10,206.12. I am of the opinion that we should not build up a larger reserve fund. Such a fund in a reasonable amount is necessary, especially as the plans under consideration will require a larger working capital. This was the first year of increased dues. The year also witnessed a very marked enlargement of our scope of activity. What the expenses would be could only be estimated. Consequently it required constant alertness and scrutiny to prevent excessive expenditures and necessitated continued calculation and estimation.

The net expense of our Annual Meeting was \$870.68. Considering the expenses entailed by reason of our Annual Meeting clinical program, which involved unusual traveling expenses for speakers, we pride ourselves that the sale of exhibitors' space permitted the actual cost of that meeting to remain at such a reasonable amount. Interest earnings of \$905.09 was made possible by connections established by your secretary that resulted in this exceptional interest earnings.

## SOCIETY

Never has our State Society, with its component county units, shown such life and activity. This is due to several factors: first, our Councillors have revealed effective interest and activity in the work that is being done in their districts. Second, our County Society officers have contributed largely of their time to society work. Third, our Post-Graduate Conferences have aroused a spirit of cordiality and willingness to achieve. As our plan of work became known, as our goal was recognized, officers and members enlisted into the ranks of activity with the end result that we are acquiring ourselves of the responsibilities that rest upon us and so our progress is one of great satisfaction because we are manifestly recording desired achievements. It but remains for us to extend this interest, to continue the work along the lines established to push on with added zeal. In doing so, 1926 will witness still greater results.

When the action was taken raising our dues to \$10.00 per member, there was some fear lest the Society lose a goodly number of members. It is therefore a matter of great gratification that we can report a membership of 3,013, which represents a gain of 119 over 1924. It is now very evident that as we enhance the value of membership our members will support, by personal and financial means, all of the Society's activities. The following reveals our

## County Society membership and numerical strength:

County	Active		Delinquent		Dead
	1924	1925	1924	1925	
Alpena	15	20	6	1	1
Antrim-Charlevoix-					
Emmet	7	13	5	1	--
Barry	12	13	3	2	--
Bay	58	61	6	3	1
Benzie	2	1	6	--	1
Berrien	46	32	11	2	--
Calhoun	93	102	24	1	1
Branch	--	12	--	2	--
Cass	7	8	--	--	--
Cheboygan	1	4	10	--	--
Chippewa-Luce-					
Mackinac	21	21	8	2	--
Clinton	12	13	11	1	--
Delta	26	24	5	1	--
Dickinson-Iron	7	15	15	2	--
Eaton	19	23	17	--	1
Genesee	115	110	31	7	1
Gogebic	18	22	13	2	--
Grand Traverse	22	24	10	2	1
Gratiot-Isabella-Clare	31	27	11	4	1
Hillsdale	26	21	6	2	--
Houghton	38	40	26	2	3
Huron	7	11	15	1	--
InghamIngham	77	92	6	4	1
Ionia	16	17	15	1	--
Jackson	65	76	--	2	--
Kalamazoo	119	111	9	2	4
Kent	178	183	12	10	5
Lapeer	16	21	4	2	--
Lenawee	22	31	4	--	--
Macomb	26	33	3	--	--
Manistee	10	10	1	1	1
Marquette-Alger	34	35	3	2	--
Mason	2	8	6	1	--
Mecosta	19	19	1	1	--
Menominee	11	10	--	--	--
Midland	6	7	--	--	--
Montcalm	17	14	--	1	1
Monroe	26	25	--	2	--
Muskegon	63	55	5	1	1
Oceana	--	7	--	2	--
Newaygo	13	9	--	3	--
Oakland	56	74	3	4	--
O.M.C.O.R.O.	9	7	--	2	--
Ontonagon	6	7	2	--	--
Osceola-Lake	--	--	5	--	--
Ottawa	27	29	5	2	--
Saginaw	48	61	21	5	--
Sanilac	12	13	4	1	--
Schoolcraft	5	5	1	1	--
Shiawassee	28	29	1	3	--
St. Clair	47	49	8	3	--
St. Joseph	16	19	4	3	--
Tri	19	18	4	1	--
Tuscola	20	24	5	1	2
Washtenaw	138	110	9	18	1
Wayne	1160	1188	84	72	6
	2894	3013	464	189	33

## POST-GRADUATE CONFERENCES

It is scarcely necessary to comment upon the intensive value of our Post-Graduate Conferences of which 24 were held during 1925. Councilors and members are familiar with the success that has attended upon them. We are deeply impressed with their value. They will be continued during 1926 with added features. It is recommended that your executive committee together with the council's committee on

county society work be authorized to develop and institute these new features and continue these district meetings. It may well be noted that our society has blazed a trail that we must concede is solving an organizational and professional problem in a manner which we feel excels that of any other state society. We are rendering to our members a service that compensates membership. We are enhancing their daily practice and we are cementing a public relationship and respect that commands public confidence and opinion. The public is accepting our messages with renewed interest.

## SECRETARIES' CONFERENCE

Experience has revealed that the annual conference of county secretaries enhances our work and enables county societies to understand the scope of our endeavor. It is therefore recommended that your executive committee be authorized to arrange for such a conference at a time most convenient during the present year.

## ANNUAL MEETING

An invitation has been received to hold our 1926 annual meeting in Lansing with the Ingham county society as our hosts. It is incumbent upon the Council to designate the time and place for our annual meeting to supervise the details. For your information and guidance, the following is the result of the referendum vote that was submitted to our members during December, 1925:

## RESULT OF REFERENDUM VOTE:

Number of cards returned.....	1,133
The vote by Propositions—	
Proposition 1. I vote for the holding of a One Day of Section meetings and One Day of General Scientific meetings.....	404
Proposition 2. I vote for the re-establishing of separate Section Meetings for the two days of the Annual Meeting as has been customary in the past.....	184
Proposition 3. I vote for the holding of combined General Scientific meetings on the two days of the Annual Meeting as was carried out at the Muskegon, 1925, meeting.....	568
Proposition 4. I vote for the holding of the Annual Meeting: In the fall.....	599
In the spring.....	455
Blank Votes .....	21

## THE JOURNAL

The Journal during the year established its intrinsic value. The reading matter consisted of 694 pages representing an increase of 126 pages. The editorial labor is time consuming and requires daily detailed supervision. Never have we had so many favorable commendations and expressions of appreciation from our members.

The advertising revenue of \$8,607.52 is the largest advertising earning in the Journal's history. It exceeded our 1925 budget estimate by \$2,607.52 and the 1924 revenue from advertising by \$2,806.42. The total earnings of the Journal was \$16,295.97 and total cost was

\$14,477.79, representing a net profit for the Journal of \$1,818.18. These figures reflect the editorial business supervision which cannot be exhibited by words nor can it be recorded by the number of hours devoted to the work.

Editorially we again refer the Council and our members to the twelve issues for appraisal as to the endeavor that was made to maintain a standard that was consistent with the profession's prestige.

#### CONCLUSION

This report witnesses fifteen years of service to the society and its members. Looking back, it is but a few years, while if one looks ahead, it represents years that are fraught with potent, but still dormant, possibilities. The work has not been void of personal gratification for the consciousness has ever been mine that I have sought our society's best interests and welfare first and not individuals. It has been a service not without personal and financial sacrifice. It has, however, been contributed unstintedly and as an earnest desire to serve my profession. I am profoundly grateful for having been privileged to so do.

Respectfully submitted,

F. C. Warnshuis,  
Secretary-Editor.

The chairman referred the several sections of the secretary-editor's annual report to the several reference committees of the council for report at the next meeting on Friday morning.

#### THE MEDICO-LEGAL REPORT

In the absence of the Chairman of the Medico-Legal committees, Councilor Charters submitted the following annual Medico-Legal report to the committee:

To the Council of  
The Michigan State Medical Society.  
Gentlemen:

The year 1925 has been uneventful in the work of this committee, with a slight lessened number of trouble cases, there being thirty-one in 1925, thirty-four in 1924, thirty-nine in 1923, and thirty-seven in 1922. These figures suggest an abatement of the mal-practice menace when considered from the viewpoint of a gradual increase in membership. Suits involving eleven members were tried during 1925 and all won by us, except that in one case settlement was made by the insurance company during the progress of the trial. This case showed a very bad result following fracture, due to nerve injury and muscle atrophy, and the settlement by the insurance company was undoubtedly wise. There are several bad cases likely to reach trial during 1926, one sponge in the abdomen, one filiform bougie broken off in the bladder and several bad fracture cases. We are also obligated by a referendum vote of

the council to defend a libel case involving two members. While libel or slander is in no sense civil malpractice, it has always been the policy of this committee to defend cases that even indirectly arise from the practice of medicine, so far as practicable. It should be understood, however, that in a libel case distinction has to be made between rumor and fact, and that it is not possible to successfully defend men who have failed to make this distinction. We have had one such experience, defending by order of the council and it is sincerely hoped that this one will be the last. Our finances are in such excellent condition that the members of the council undoubtedly felt justified in undertaking the defense of the pending case. We expended last year in attorney fees and court expenses \$3,353.70, but have a cash balance of \$6,309.34.

Yours very truly,

Chairman Medico-League Committee,

F. B. Tibbals,  
August McLean,  
William J. Stapleton, Jr.

The Council,  
Michigan State Medical Society,  
Gentlemen:

To the request of your Executive Committee that the funds of the Medico-Legal Committee be audited, I replied at some length to the Secretary-Editor, explaining that I had never handled any cash, that the sum total that can possibly be misused consisted of a few interest coupons. Hence, I felt that a commercial audit was a waste of money and suggested that any member of the council can run over the stubs in the checkbook and make an audit in ten minutes. As I will not be present at the meeting of the council, I would suggest that, if the Council still feel that an audit of the Medico-Legal Fund should be made, the councilor from this district be authorized to select an auditor and have him audit the account at the Peoples State bank. The fund has always been kept in this bank. The canceled checks have all been retained by them. The deposit can be checked through the treasurer. The only books I have ever kept have been notations on the check stubs of receipts and disbursements.

Yours very truly,

F. B. Tibbals.

No. 3. Councilor Randal, who was chairman of a special committee, appointed at the Muskegon meeting to submit names of several appointees for the State Board of Registration in Medicine to the governor, reported that his committee had made such presentation to the governor, further reporting that the governor had reappointed the retiring members of that board.



The report of the committee was accepted and the committee discharged.

No. 4. On motion of Councilor Bruce, supported by Baird, the minutes of the several meetings of the Executive Committee were approved by the council.

No. 5. On motion of Councilor Randal, supported by Van Leuven, a request was made to so amend our charter in order that a larger reserve or endowment fund might be acquired and held by the society. This motion was referred to the finance committee for consideration.

No. 6. President Darling personally addressed the Council upon the work and activities of the society and commended the activities that were being manifested in our organizational work.

No. 7. The council adjourned at 5:00 p. m. to reconvene at 9:00 a. m. on Friday morning.

#### SECOND SESSION

The second session of the Council was a special one, also held in the Union at 6:30 p. m., at which time the following were the guests of the Council: President Little of the University of Michigan, the Dean and members of the faculty of the Medical Department of the University of Michigan, the Dean and several members of the medical faculty of the Detroit College of Medicine and Surgery, the State Board of Registration in Medicine was represented by Doctors Connor, Kelley, McLaughlin, Stone, LeFevre and O'Neil. The State Department of Health was represented by Doctors Olin and Kiefer. The State Hospital Association was represented by Dr. Babcock of Detroit and the president of the State Society and the members of the Council.

The purpose of this meeting was for the discussion of the inter-relation of these several organizations that are developing the medical progress of the state. The purpose being further to obtain, if possible, a basis for inter-allied activity, co-operation and the advancement of the inter-relating interests. The meeting was presided over by Chairman of the Council, Dr. J. B. Jackson and the following participated in the discussion of the motive that inspired this meeting: President Darling, Dean Cabot, Dean MacCracken, ex-president, A. P. Biddle, President Little of the University, Dr. Olin, Dr. J. D. Bruce, Dr. LeFevre, Dr. Babcock and Dr. Corbus.

During the course of the discussion Dr. J. D. Bruce moved that the chairman appoint a committee of three to which were to be added the president of the university, president of the State Medical Society, president of the State Board of Registration, deans of the medical schools, which committee was to be charged with the duty of investigating, developing and

submitting a plan for the carrying out of the several subjects that had been submitted during the discussion and to obtain the purposes for which this meeting was held. This motion was seconded by President Darling and carried unanimously.

It was moved by Dean Cabot, supported by Dr. Biddle, that a meeting of this same group of representatives be held at the time of the next midwinter meeting of the Council.

The meeting adjourned at 10:30 p. m.

#### THIRD SESSION

The third session of the Council was held in the Union at 9:00 a. m. on Friday, Jan. 15, 1926, and was called to order by Chairman Jackson. The following were present: Councilors Stone, Charters, Burke, Ricker, Powers, MacKenzie, Baird, Bruce, Van Leuven, Corbus, Randal, Green, LeFevre, President C. G. Darling, Executive Secretary Harvey George Smith and Secretary-Editor F. C. Warnshuis.

No. 1. The committee on county society work reported as follows: The committee called the attention of the Council and members to the Post-Graduate Conference work that had been conducted during the past year and which was commented upon by the Secretary-Editor in his annual report, the meetings of which, as well as the scope of the work had been published in each issue of The Journal. The committee commended the splendid result that had been obtained and special appreciation was extended for the co-operation that had been accorded to the work by the officers and members of county societies. The committee recommended that the work be conducted during the coming year and that the added features proposed by the executive committee and the tentative plans that had been submitted be approved in order that our members might be the recipients of the benefits that will accrue from this feature of organizational work.

No. 2. The committee considered the advisability of re-districting the Councilor districts of the state and requested the secretary to properly tabulate the proposed plan of re-districting and to submit a copy of each Councilor for their further comment and when approved that the executive committee of the Council will submit the same to the next session of the House of Delegates for their approval.

The committee notes with very great satisfaction the present status of our membership and approves the Secretary's comment thereupon and urges that membership in our society be compensated to the individual members by increasing individual benefits. The committee feels that as the Society is concerned with the personal interests and professional progress of its members, their

whole-hearted support and intensified activity will be manifested.

B. R. Corbus.

On motion of Councilor Stone, supported by Charters, the committee report and recommendation were adopted.

#### FINANCE COMMITTEE

The finance committee report was submitted by Chairman LeFevre.

(a) The Finance Committee recommended the adoption of the following budget for 1926:

#### MICHIGAN STATE MEDICAL SOCIETY PROPOSED BUDGET, 1926

ESTIMATED INCOME:  
3,000 Members at \$10.00.....\$30,000

EXPENDITURES:  
To Medico-Legal Committee, 3,000  
at \$2.00.....\$6,000  
Journal Subscription, 3,000 at \$2.50.... 7,500  
Salary Executive Secretary..... 5,500  
Expenses—Executive Secretary..... 500  
Stenographic Service ..... 2,500  
Rent, Light, Telephone and  
Office Expense ..... 750  
Annual Meeting ..... 500  
Committee Expenses ..... 500  
Printing and Postage ..... 300  
Council Expense ..... 1,000  
Delegates to A. M. A. .... 350  
Joint Committee Education ..... 500  
Contingent Fund ..... 600

TOTAL .....\$30,000

#### JOURNAL BUDGET

INCOME:  
3,000 Subscriptions .....\$7,500  
Advertising Sales ..... 7,500

TOTAL .....\$15,000

EXPENSE:  
Printing and Mailing.....\$11,500  
Wrappers ..... 225  
Editor's Salary ..... 3,000  
Reserve ..... 275

TOTAL .....\$15,000

(b) It is recommended that the Medico-Legal Committee become aggressively active in defense of the Battle Creek members who were sued for libel.

(c) The committee recommends that the expenses of our delegates to the American Medical Association meeting be limited to the railroad fare and hotel room.

(d) The committee recommends that the Secretary be instructed to take the necessary steps to secure the amendment of the Society's charter in order that reserve and endowment funds may be held to a greater amount than now authorized under the charter.

(e) The committee finds that the tabulated statements of the expenses and funds of the Society are accurate and kept in a commendable business-like manner. The assurance is manifest that the funds of our Society are being handled and disbursed with

proper safeguard and care. The committee desires to extend the Society's thanks and appreciation to the Executive Committee, Chairman of the Medico-Legal Committee, Executive Secretary, and to the Secretary-Editor for the excellent manner in which they have discharged their official duties for the benefit of our members.

Signed by the committee,

George L. LeFevre,  
F. S. Baird,  
B. F. Green.

The several features of the finance committee report was the subject of careful and detailed discussion. The items of the budget were carefully considered and the amounts stated were scrutinized with the view toward causing them to comply with the financial needs of the society. On motion of Councilor Bruce, supported by Councilor Stone, the report of the finance committee with its recommendations was adopted.

#### REPORT OF PUBLICATION COMMITTEE

The report of the publication committee was presented by Councilor Stone. Attention was drawn to the editor's comment on the Journal. Approval was expressed for the fine type of Journal that is being issued from month to month. The committee draws particular attention to the advertising sections of the Journal and points out that this income makes possible the type of Journal that is being issued and that were it not for this income, a larger assessment would have to be levied upon our members. The committee therefore urges the support and patronage of our advertisers. The committee calls attention to the excellent editorials that are given in each issue and comments upon the harmonious spirit existing between the Publication Committee, the Editor and the Executive Committee of the Council, as well as the renewed interest that is being taken in The Journal by our members. The committee feels that with the support that was rendered to The Journal during the past year that it will be possible during the coming year to issue the type of Journal that will fully reveal the profession of our state, while at the same time raise The Journal to a higher standard in the field of medical Journalism.

Signed by the committee,

R. C. STONE,  
J. D. BRUCE,  
A. J. MACKENZIE.

On motion of Councilor Randal, supported by Councilor Burke, the report of the publication committee was adopted.

#### ANNUAL MEETING

Chairman Randal, special committee to determine the time and place for the Annual Meeting advised that the meeting be held at

Lansing, September 15, 15 and 16. That in the event that the new hotel is not available, the Executive Committee is in power to secure a suitable place of meeting. On motion of Councilor Randal, supported by Councilor Green, the recommendation of the committee was adopted.

#### SCIENTIFIC EXHIBITS

On motion of Councilor Corbus, supported by Baird, it is moved that the Secretary be instructed to omit from our annual sessions commercial exhibits. After full discussion, the motion unanimously carried.

#### ELECTIONS

On motion of Councilor Green, supported by Corbus, Dr. J. D. Bruce was elected for a term of five years as a member of the Medico-Legal Committee to succeed C. B. Stockwell, whose term has expired. Ballot was cast by the Secretary and Dr. Bruce was so elected.

Dr. F. C. Warnshuis was nominated for Secretary-Editor by Councilor Corbus and supported by several Councilors. On motion the Chairman was instructed to cast ballot for the Secretary. The Chairman did so cast and declared his election.

On motion of Dr. LeFevre, supported by Dr. Ricker, the secretary was instructed to cast the ballot for Dr. D. Emmett Welsh as Treasurer. The Secretary did so cast the ballot and determined Dr. Welsh elected.

The following resolution was presented by Councilor Baird and supported by Councilor Ricker and after full discussion the resolution was adopted.

Resolved that the Council of the Michigan State Medical Society through the proper channels, urge Commissioner Olin of the Board of Health to use his offices with the Governor and Legislature to secure a return of the fee of 50 cents for reporting obstetrical cases as required by law and of tuberculosis cases.

President Darling then addressed the Council and pointed out the avenues of Council activity for the Society. He commented upon the meeting that was held the previous evening and pointed out that the meeting was a meeting that would develop the most desired advantages of organized medicine in our state. He commended the Council for their zeal and activity in the discharge of the Councilor duties and commended the Society a hearty support void of individual quests for the better and greater developments of the opportunities that confront us.

On motion the Council adjourned at 2 p.m.

Signed,

J. B. Jackson, Chairman,

F. C. Warnshuis, Secretary.

## Among Our Letters

NOTE.—This department is the open forum of our members. Your communications and discussions are welcomed. Anonymous communications cannot be accepted, though at times names may be omitted by the Editor. Personalities will not be printed and responsibility for opinions is not assumed. We invite your interest in this department. Address: The Editor, Journal, Michigan State Medical Society, Powers Theatre Bldg., Grand Rapids, Mich.

Dear Doctor Robertson:

I have read with much interest your article in the January issue of "The Journal" on "Medical Policies." I note that on page 28 of that article you credit me with the advocacy of a plan of development of health centers, as follows:

"For instance, Doctor Cabot of the University of Michigan, proposes to develop health centers, governed by the University, manned by salaried professors, and supported, of course, by state funds."

Evidently there has been some mistake here since I have never believed in such a course and have never advocated it. I assume that inadvertently you have confused me with someone and I remember that former Dean Vaughan was at one time credited with having held such an opinion. I am not clear that he ever did hold this opinion though I have heard it attributed to him.

In any case, I have not, myself, believed in this method and fear that it would not work satisfactorily. Since I feel that you would not intentionally misrepresent the opinion of a colleague, I am writing to ask if you will not communicate with the editor of "The Journal" rectifying this error in such a way that it may be printed in the next issue? It appears to me important that the members of the society should not believe that the dean of the Medical School holds views which are entirely foreign to him.

With best regards, I am

Sincerely yours,

Hugh Cabot, Dean.

F. Dunbar Robertson, M. D.,  
Ashton Building,  
Grand Rapids, Michigan.

Dr. Robertson tenders his apologies to the statement made and is eager to correct the misrepresentation made of Dr. Cabot's position.

Editor of The Journal:

We are sending, for your attention, a copy of our new general catalog which, although it has only been recently issued, has been generously complimented by the doctors who have seen it. We should be glad to send a copy to any of your readers who are interested, and we hope that this one will find a very convenient place in your file for ready reference.

Very truly yours,

Swan-Myers Company,  
R. M. Cain, Pres.-Gen. Mgr.

Editor of The Journal:

I am wondering if you knew of some good, young physician who would like to locate in a country town. Dr. Ingleright was here for about twenty-five years but moved to Niles a short time ago, which leaves us without a resident physician.



Dr. Ingleright had a practice here of from \$8,000 to \$12,000 a year, that is, he collected that amount. The nearest physician is at West Branch, which is fifteen miles south-west, none north for fifty miles, none east for fifty miles and none south nearer than thirty-five miles.

We have good gravel roads and a wonderful country to practice in. We would furnish a good office room with heat, light and telephone gratis.

I am enclosing you a picture of our building in which the office is located.

Kindly write me if you know of any doctor that would be interested.

Sincerely yours,  
H.S. Karcher.

Editor of The Journal:

A Merry Christmas and a Happy and Prosperous New Year is my wish for You.

Enclosed with this is an article of this last summer's visit to Europe which I am sending to you for use in The Journal if you think it worth while. Probably you can use it as a "filler."

At this time I want to add a word of congratulation to you for the great work you are doing for medicine, not only in Michigan, but in the country as a whole. I wish there were more men with your spirit in the ranks.

Yours fraternally,  
William J. Stapleton, Jr.

Editor of The Journal:

This Association is composed of about 65 eye, ear, nose and throat men, and it holds monthly meetings on first Wednesday of each month. We operate under a constitution and by-laws in conformity with the requirements of American Medical standards and allied associations of men doing special work.

Our membership committee (5) operate on a sliding scale of from one to five years service. Our membership is limited to men doing eye, ear, nose and throat work and oral surgery.

The association at the last meeting January 6, expressed a desire that this information be forwarded to you for record.

Our next meeting will take place February 3, 1926 at Post Tavern, Battle Creek. Program as follows.

Orthopedic Surgery—R. D. Sleight, Battle Creek.  
Technique of Sub-Mucous Operation—A. E. Owen, Lansing.

Case Report—A. P. Wilbur, Kalamazoo.

Oral Surgery—D. C. Lyons, Jackson.

Any additional information will be gladly supplied.

Very Truly Yours,  
H. D. Obert, Secretary.

Editor of The Journal:

I think there should be one general session, each day, of not less than one hour's duration, taking up questions of general interest to the members of the profession.

In past years, the members of the society have been barred from taking any part in the proceedings that helped to formulate the policy of the society for the coming year.

The members must be made to feel that the society is theirs. That they have some part in its proceedings, or they lose interest. We can seek scientific instruction, at a time convenient to us, which will be of more value to us, in our professional work, than anything offered at the annual

meeting of the society. The inducement, to join the society for scientific purposes, is not great.

The members of the society must be made to feel they have, or can have, some part in shaping the policies of the profession for they lose interest in the societies activities.

A few years ago the organized M. D.'s of Michigan had a law passed banning advertising without consulting but a small minority of the medical profession.

What has been the result of this action?

Loss of respect and prestige in the estimation of the public. Why? The law, banning advertising of our work and now what do we find? Organized medicine trying to get the doctor's name before the public by the newspaper route.

I do not believe the method chosen to obtain newspaper publicity for the doctor will be successful. The number of doctors to which this scheme will apply is too small to make it of value to the profession at large.

I ask you this question: When my patient, Mrs. Doe, moves to Grand Rapids, what authentic source of information is available to guide her in the selection of a physician to care for her family? I know of nothing but public gossip, never any reliable. What the doctor needs is some lawful method to keep him in touch with the public, some method by which he can tell the public what he is doing and is fitted to do.

I think the public look upon us as a joke because of our failure to use the newspaper to educate the people.

Fraternally,  
Charles D. Cullen.

Editor of The Journal:

More than \$200,000,000 have been invested in tuberculosis sanatoria and hospitals in the United States. There are nearly seven hundred institutions of this type and they make available sixty-six thousand beds for the sick from tuberculosis. Their annual maintenance alone amounts to almost \$75,000,000.

Tuberculosis sanatoria are the original cornerstones upon which was built the now highly successful and life saving movement represented by the organized anti-tuberculosis campaign in America. To what extent are these institutions now utilized, and are more needed or not? This is the definite practical subject to which Mr. Drolet, statistician of the New York Tuberculosis and Health Association, has applied himself, and in his study of the "Recent Changes in Leading Causes of Death and Their Bearing on Tuberculosis Hospitalization" he gives us the broad facts underlying the present tuberculosis and general health situation in this country.

From 1900 down to 1918 in the United States the tuberculosis mortality remained steadily around 150,000 deaths a year; thereafter this great loss was reduced and the deaths now number 100,000 annually. Since 1920 there has been an increase, especially due to after-war building of 30 per cent in the number of tuberculosis beds in sanatoria, while the mortality was actually decreasing.

Between 1910 and 1922 tuberculosis in the United States passed from being the leading cause of death to fourth rank, being replaced by diseases of the heart. The general tuberculosis situation has been basically altered and, in the communities where there is already available a tuberculosis bed for each tuberculosis death, further enlargement of institutions, or building of new ones, instead of utilizing to fullest capacity existing facilities, is perhaps open to question. On the other hand, Mr.

Drolet's survey indicates that in only twelve states has this situation been reached, and there is still a deficiency of 39,000 tuberculosis beds in the remainder of the country.

After securing the establishment of tuberculosis institutions, and getting patients to utilize them, the greatest problem has been to retain the sick sufficiently long to achieve a cure or arrest of the disease. Mr. Bell and Mrs. Ilsen of the Hospital Service, New York Tuberculosis and Health Association, describe in the paper enclosed the "Psycho-physiological Effect of Music on Tuberculosis Patients" from their practical knowledge of the value of music as an agency among tuberculosis patients to "dispel morbid thoughts, depressing mental condition, and \* \* \* to bring contentment, renewed interest in life and a willingness to exert the will \* \* \* to fight the battle."

The Hospital Service of the New York Tuberculosis and Health Association, under their direction, has been responsible for the arranging during the past year of more than fifteen hundred musical performances, both in auditoriums, and in wards at the bedside of the sick in New York City's tuberculosis institutions, where close to 10,000 patients are reached annually. Mr. Bell and Mrs. Ilsen conclude that appropriate music is "a vital and enduring element in tuberculosis treatment."

The practical experience of the authors of these studies of tuberculosis hospital work may be better appreciated if we recall that Mrs. Ilsen was Director of Music in the Military Hospitals of the United States during the war period. Mr. Bell has been previously associated with the New York City Department of Health and was also President of the Board of Health of Glenridge, N. J., and that Mr. Drolet has been successively Statistician of Trudeau Sanatorium, the Tuberculosis Division of Bellevue Hospital, New York City, and of the Commission for the Prevention of Tuberculosis in France.

Comment and observations on these studies will be appreciated.

Sincerely yours,

Harry L. Hopkins.

New York Tuberculosis and Health Association.

Editor of The Journal:

You are probably aware of the fact that Bernarr Macfadden is sending "lectures" and exhibitors over the country giving a series of lectures on physical culture before local civic clubs. In some cases they have even persuaded the school authorities to permit the use of the public schools for this purpose.

When they attempted to do this in Richmond, Virginia, the State Health Commissioner, Dr. Ennion G. Williams, immediately got in touch with the American Medical Association and asked for such material as we had published on Macfadden so that he might put it in the hands of the officers of the civic organizations who had been approached by the Macfadden advance agents. He was sent pages from those issues of *Hygeia* that carried articles on this subject and was able with these to head off the Macfadden scheme as the Rotary, Kiwanis, Lions and other civic clubs canceled the "lectures."

We now have the Macfadden material in reprint form, and we are enclosing one of the reprints. May we suggest that when the Physical Culture concern attempts to impose upon people of your state in this way that the local health officer be urged to get our reprints to put in the hands of

the officials of the various clubs and other organizations through which Macfadden tries to work.

Very sincerely yours,

Arthur J. Cramp.

The Journal A. M. A.  
Bureau of Investigation.

## State News Notes

Despite the general tendency towards relaxation of effort during the holiday season, the Wayne County Medical Society has continued to put on its usual high grade program with an ever growing attendance at meetings—a definite indication that the County Society depends in large measure on its program committee for its success.

On December 14, Dr. Jacques Forestier of Aix-les-Bains, France, gave a most interesting talk summarizing his work of the past four years on the use of Lipiodol in X-ray diagnosis. His series of lantern slides showing the various uses to which this non-toxic oil can be put was very impressive and served to make the evening one that will long be remembered by those who attended.

On December 21, Dr. J. Shelton Horsely of Richmond, Va., delivered a very instructive discourse on "Biologic Principles Underlying Gastric Surgery." Dr. Horsely certainly lived up to all the advance reports of his ability as a surgeon and he succeeded in acquiring a host of new admirers by the thoroughness with which he went into his subject.

No meeting was held on December 28th. The first meeting of the new year was held under the auspices of the Library Committee on January 4th, 1926. Dr. Jos. W. Courtney, President of the Boston Society for the Study of Medical History, was to have read a paper entitled "Benjamin Waterhouse, M. D., American Pioneer," but owing to sudden illness in the doctor's family, he was unable to appear and his paper was read by Dr. H. M. Rich, Chairman of the Library Committee. Incidentally, it might be noted here that there is real stimulus as well as the finest kind of entertainment offered by this type of program and the encouragement of the reading of papers before County Societies, dealing with the various phases and characters of Medical history cannot help but build up the attendance at the meetings.

On January 11th, Dr. W. McKim Marriott of the Washington University Medical School, delivered a most interesting essay on "Observations Concerning the Nature and Treatment of Certain Forms of Nephritis"—a talk which was enjoyed by a large number of the members of the Society.

On the night of December 24th, an explosion occurred in the Wayne County Medical Society clubhouse which blew out a large number of windows in the Society building and caused damages estimated at \$6,000.

## AMERICAN BOARD OF OTOLARYNGOLOGY

An examination will be held by the American Board of Otolaryngology in Dallas, Texas on Monday, April 19, 1926, and in San Francisco, California on Tuesday, April 27, 1926.

Application should be made to the Secretary, Dr. H. W. Loeb, 1402 South Grand Boulevard, St. Louis, Missouri.

The Annual Cancer Education Campaign of the Wayne County Medical Society was held in conjunction with the American Society for Control of Cancer during the latter part of January. Dr. Francis Carter Wood, head of the Crocker Research Institute, Columbia University, gave a demonstrative clinic at Harper Hospital in the morning of January 22, and addressed the Society in the evening. Free clinics for the Diagnosis of Cancer were held at all Detroit hospitals during the week of January 25th.

Dr. and Mrs. L. J. Hirschman, Detroit, sailed February 5 for a European trip and which will include the Orient.

Wayne County Medical Society meetings are now held on Tuesday evening. Members from the state who are in Detroit will always find profitable programs and are invited to attend.

Dr. and Mrs. E. O. Leahy, Jackson, announce the arrival of a baby girl, Donna, on Monday, December 14, 1925. Ed's smile is wider than when he double crosses his terrific golf slice and lands straight ahead on the fairway.

There has been an epidemic of stolen medicine bags from cars in and about Jackson and when the bags have been recovered only the narcotics are missing. The substitution of a little apomorphine

in morphine bottles might stop this for a while, at least till the boat got to land again.

Dr. G. Rex Bullen, Jackson school physician for a number of years, has resigned to go into general practice with offices in his home at the northwest corner of Franklin and Third Streets. He will have office hours two half days a week at Parma, about 12 miles west of here.

Dr. James H. Hudson, of Merrill, Michigan, was prosecuted for failure to report births under Act No. 343, P.A. 1925 and was fined \$20 and costs amounting to \$21.50.

Dr. Hudson pleaded guilty and the court allowed him until January 7th to complete filing all unreported births with the understanding that failure to do so would subject him to further prosecution and as prosecution under second or subsequent charges carries a fine of not less than \$50 and not more than \$200, it becomes quite a serious thing.

The State Department of Health is investigating all violations of this law which come to their notice and will actively prosecute violations of this kind.

The growing legal importance of birth records leaves no other course open. The Department is charged with protecting the rights of the citizens of this state in seeing that their citizenship is established by proper birth records and carelessness or negligence on the part of the birth attendants cannot be condoned.

## OUR SOCIETY BUSINESS AND ACTIVITIES

HARVEY GEORGE SMITH  
EXECUTIVE SECRETARY

NOTE: This Department will each month contain a discussion and report of our Society work and planned activities. Your interest and correspondence as to your problems is solicited.

### POST-GRADUATE CONFERENCE

The second post-graduate conference for the Tenth Councilor District was held at Bay City January 26. Physicians from Saginaw, Tuscola, Midland and Genesee counties were guests of the Bay County Medical Society at luncheon. The Bay County Medical society is one of the leaders in the state.

The attendance passed the one hundred mark which again is an indication that the post-graduate conferences are fulfilling the desires of the members in timely post-graduate instruction.

The following program was presented:

#### MICHIGAN STATE MEDICAL SOCIETY POST-GRADUATE CONFERENCE SHOPPENAGON GROTTO

BAY CITY—JANUARY 26, 1926

#### PROGRAM

10:20—10:30—Opening Statements—Fred J. Baird, M. D., Councilor, chairman.

10:30—11:00—Errors in Diagnosis—Fred Coller, M. D., Ann Arbor.

11:00—11:30—Arthritis, John B. Youmans, M. D., Ann Arbor.

11:30—12:00—Delayed and Mal-Union in Fractures, F. C. Kidner, M. D., Detroit.

12:15—2:00—Luncheon with Rotarians—Wenonah Hotel.

(Visiting Physicians Guests of Bay County Medical Society)

2:15—2:45—Goiter, Fred Coller, M. D., Ann Arbor.

2:45—3:15—Orthopedic Corrections, F. C. Kidner, M. D., Detroit.

3:15—3:45—Essentials and Methods of Laboratory Diagnosis, John B. Youmans, M. D., Ann Arbor.

3:45—4:00—Recess.

4:00—4:40—Differential Diagnosis of Pelvic Diseases in the Female, H. Hollister Judd, M. D., Detroit.

4:40—5:15—Common Involvements of the Rectum, Edward G. Martin, M. D., Detroit.

5:15—6:00—Appendicitis in Children, G. Van Ambler Brown, M. D., Detroit.



## DEBITS AND CREDITS FOR COMMITTEES

The committees of the County Medical Societies of Michigan by virtue of their position are directed to carry serious responsibilities. Whether or not they assume the obligations of their office is reflected in the records of the County Medical Societies at the end of each year. Active, energetic committees show credits which are directly proportional to the interest manifested. Lack of interest and of activity may close a society year with not only nothing done but with debits. Every committee exists for a definite purpose and that purpose should be attained in part or entirety.

Dr. Max Mason, president of the University of Chicago, speaking before the City Club of Chicago said, "We make progress or accomplish a purpose in a systematic way. First, we gather all the facts on the subject under consideration; second, we form a judgment and third, we proceed to act and carry out by a definite plan the judgment arrived at." If this is true with individuals, it is true with organizations and with committees of County Medical Societies.

If this plan is followed by all the committees of the County Societies of Michigan, no debits will be reported when this year concludes. In which column will your committee report at the end of your year of service to your society and profession in Michigan?

## SCIENTIFIC TEAMS

Reports from County Medical Societies in all sections of the state of Michigan indicate that the minimum program has been or is to be adopted. One section of the program states definitely that scientific teams shall be organized by the societies for aid to adjoining societies in scientific programs.

Reports from many societies advise that teams are ready but they have no place to go. They have had no invitations and certainly they cannot flaunt their services upon their fellow practitioners. Large societies have a score of men ready to help their fellows.

Is this desire to serve to go unheard or fall by the wayside? It may be, too, that there are a number of societies who are not having programs, who are bemoaning their fate. "Ask and you shall receive." Secretaries or committees on the arrangement of programs need only write their fellow officers—the secretaries of neighboring societies, state their wishes in the type of program desired, the time and the place of meeting several weeks in advance and they are assured of scientific papers—that will make the members of the respective societies say, "Well done." Ask again but remember we're ready to help the other society, too.

## Deaths

George T. Britton, M. D., died Dec. 30, 1925, of pneumonia following a four-day illness at Kalamazoo. He was a member of the Kalamazoo Academy and a graduate of the Detroit College of Medicine.

## County Society News

### JACKSON COUNTY

The last meeting of the year was held on Tuesday, December 15, with a business meeting at W. A. Foote Hospital for the election of officers and a banquet in the evening at the Otsego hotel. The election resulted as follows: Dr. Harold L. Hurley, president; Dr. Corwin S. Clarke, vice president; Dr. Don F. Kudner, secretary for the third successive year, and also the re-election of Dr. L. J. Harris as treasurer. It really should go on record as the re-election of Miss Marian Young, Dr. Harris' secretary, who has served faithfully and helped the incumbent hold his job ever since he has been in office.

The banquet was, truthfully for once in such a report, nothing to brag about, as the chef tried to camouflage some beet as chicken dark meat. Dr. G. C. Hicks presided as the retiring president and immediately after the meal which the doctors' wives attended as guests of the society, introduced our field secretary, Mr. H. G. Smith, who spoke briefly on the aims of the society for 1926. The meeting was then turned over to Dr. E. C. Taylor, chairman of the December meeting. Dr. Taylor introduced as the first speaker the president of the state society, Dr. C. G. Darling of Ann Arbor. It would be better to say he presented him to us as we needed no introduction, although matters concerning the president's ability as a huckleberry picker were introduced as news to all of us.

Dr. Darling gave a very clever and interesting resume of the progress of surgery at the medical school at Ann Arbor, interspersed with anecdotes on some of the chief characters in the advance of aseptic surgery. The subject was well chosen as one of interest to a mixed audience and was very well received.

Dr. H. N. Torrey, of Detroit, then gave us a description of his trip last year to the province of Kenya in Eastern Africa with a group of his Detroit friends and illustrated the talk with a number of reels of what he called "amateur movies" but which gave the audience a good idea of some of the hair-raising experiences he had while hunting wild animals. The humor of both speakers was very dry and the evening would have been well spent with either alone as the entertainer but the double bill was just that much more so.

Of local interest was a showing of a reel of movie film by Dr. W. L. Finton who "shot" some of our local talent disporting themselves on the picnic grounds this summer at the annual picnic.

Dancing concluded the program.

### SHIAWASSEE COUNTY

The first meeting of the Shiawassee County Medical Society for the new year was held in the city hall auditorium Tuesday evening. Pursuant to a newly adopted policy of the State Medical Society the meeting was of an educational nature, the clergymen of the county being guests of the doctors. Owing to the inclement weather many who would otherwise have attended, were pre-

vented from coming, but those present were amply repaid for braving the elements.

The subject for the evening was "Narcotics," and Dr. McCormick presented an exceedingly well prepared paper, which was listened to with great interest. Reviewing the many kinds of narcotics, the doctor dwelt on the more common ones, such as cocaine, opium, and alcohol. The pernicious effects of the latter, were fully considered, but the enormity of the extent of other narcotics such as hashish and betel nut, was a surprise to many of his listeners. The fate of the present regime as to prohibition was said to be surely for the best and that the step having been taken, the nation would never recede from its present stand.

Many of the visiting clergymen availed themselves of the opportunity given them by Dr. J. O. Parker, chairman protem, appointed by Dr. McCormick during the reading of his paper, to congratulate the doctor on his excellent paper, and expressed themselves as having been greatly enlightened.

A resolution congratulating the state society president, Dr. C. G. Darling of Ann Arbor on his seventieth birthday today, was introduced by Dr. R. C. Mahaney and forwarded to Ann Arbor, by the local secretary, Dr. W. E. Ward.

At the opening of the meeting, the retiring president, Dr. J. J. Haviland, introduced the incoming one, Dr. C. McCormick very humorously, ending by reciting the poem "The Boys." The new president is the Nestor of the medical profession of the county.

The next meeting will be held February 9, in the city hall.

### TRI-COUNTY

The meeting of January 6th demonstrates an increasing amount of interest, each meeting bringing out greater numbers, with live discussions.

The meeting was called to order by the president, Dr. R. D. Sleight, and the minutes of the last meeting read. The unfinished business which included the reading of the constitution, as amended, and its adoption and following this, nominations were in order for electing the "Membership Committee" of five. Final count resulted in the election of Dr. Bird, to serve five years, Dr. Wilbur, four years; Dr. Haughey, three years, Dr. Ellis, two years, and Dr. Colver, one year.

Dr. G. E. Winters presented a treatise on asthma which brought forth considerable discussion from all present.

The committee on Membership, through its chairman, Dr. Bird, instructed the secretary to notify the following of their election to membership: Drs. Weinburg, Behens and Kennedy of Lansing. Drs. Langford and Myers of Ann Arbor, and Dr. Don Lyons of Jackson.

At our next meeting to be held Wednesday, February 3, 1926, 6:30 p. m. at the Post Tavern, Battle Creek, we have reason to believe no one will want to miss this: Ophthalmic Surgery, by Sleight; Technique of Sub-Mucous, by Owens; Case Report by Wilbur; Oral Surgery, by Lyons. You will find topics to interest you every minute, so sign the card, mark your appointment book for February 3, (S. M. T. A.) and plan to spend a few hours with specialists you ought to know.

We also wish to advise that the Graybar Electric Audiometer will be demonstrated at this meeting; Battle Creek men will kindly furnish three or four

cases of obstructive deafness or nerve deficiency, loss of hearing, etc.

We want to give our "Committee on Membership," plenty of work so send or bring an application for a new member.

See you at the Post Tavern—February 3.

Yours very truly,

H. D. Obert.

P. S.—Several have neglected to pay 1925-26 dues. Kindly remit to secretary.

### HOUGHTON COUNTY

The Houghton County Medical Society held its regular monthly meeting at the Scott hotel, Hancock, January 5, with 23 members present. After the reading of the minutes and allowing of bills the following members were received by transfer: Dr. Alec McNab, formerly of Lawrence, Mich., and Dr. Oler, Calumet. The application of Dr. F. E. Coster of the C. & H. Staff was received and referred to the board of censors. A motion was made by Dr. Harkness, seconded by Dr. Rupprecht, that the Society accept Dr. Henry Holm's transfer from the Marquette-Alger Medical Society.

The letter from the executive-secretary with regard to the minimum program was read and a motion was made to lay the matter on the table until the next meeting.

The Society then proceeded to elect the following officers for the year: President, Dr. A. C. Roche, Calumet; vice president, Dr. M. D. Roberts, Hancock; secretary-treasurer, Dr. G. C. Stewart, Hancock; censor for three years, Dr. W. T. S. Gregg, Calumet; delegate to the state convention, Dr. I. D. Stern, Houghton; alternate delegate, Dr. Simon Levine, Houghton.

A resume of the Houghton County Medical Society for the year 1925 was read by the secretary as follows: Total attendance 152; average attendance, 15; largest attendance, 27; total number of members, 40; total number of members removed by death, 6, namely Drs. Scallon, Lawbaugh, Reese, Simonson, Gallen and Rowe; total number of members by removal, 3, namely Drs. Wilkinson, Conrad and Bicknell; Post-Graduate conference held at Houghton in July; total attendance at conference, 55; motion picture films shown in May, loaned by the H. G. Fischer Co., of Chicago. Social activities: Dinner given by the staff of St. Joseph Hospital to members of the Houghton County Medical Society. The week of November 1 to 7 was designated as the week of physical examination for members and their families.

The secretary then read the financial report for the year 1925.

The Houghton County Medical Society was very fortunate in being able to have as its guest of honor Dr. R. L. Kahn of the Michigan State Board of Health who next gave a talk on "Serum Diagnosis of Syphilis." Dr. Kahn first took up the problem: "Why is the serum diagnosis of syphilis important?" Because syphilis is important. Syphilis is prevalent everywhere, in all climates, and is no respecter of age. Syphilis is secretive; it often does not show obvious symptoms, and is a marked danger to the community.

Up to 1906 no blood test was available for syphilis. At this time Dr. Schaudinn announced the discovery of the *Spirochaeta Pallida*; Bordet and Genou discovered the phenomenon of complement

fixation and Wasserman, Neisser and Bruck in attempting to apply this phenomenon to syphilis, discovered the Wasserman test.

From the very beginning of the use of the Wasserman test, different workers became interested in developing a simpler test for syphilis. It was early recognized that the Wasserman test has numerous sources of error. First, the use of five different biological reagents: 1, complement; 2, amboceptor; 3, antigens; 4, blood and corpuscle suspension; 5, patients blood serum. These different reagents may vary. Second, the test has to be incubated; third, is the different technique used in different laboratories. All of which accounts for the different results in the hands of different workers.

Many attempts have been made to evolve a test for syphilis based on the phenomenon of precipitation. In 1921, Dr. Kahn began to work on this problem by studying the principles governing precipitation in syphilis. The test he evolved is now widely used throughout the world and in the Michigan State Laboratories alone there is a record close to 200,000 Kahn tests.

The test is performed by mixing the patients serum with three different amounts of standardized antigen. The things that recommend the test are simplicity and lesser sources of error thus assuring greater reliability of the end results.

Dr. Kahn stated that in many parts of the world no serum test for syphilis is available because of the complicated technique of the Wasserman test.

The performance of the test should be in the hands of one trained in laboratory work. Miss Mills is the laboratory technician at the Houghton State Board of Health Laboratory stated that she felt safer in giving out a positive result with the Kahn test than with the Wasserman.

This subject was very freely discussed by all members present and numerous questions were asked Dr. Kahn with regard to this work.

The Society then adjourned to lunch at which time further discussion of the subject was indulged in.

We take this opportunity to thank Dr. Kahn for his kindness in coming to us and giving us such an interesting and instructive talk.

A number of the members stated that this was one of the best medical meetings we have had in Houghton county.

The president urged that all members promptly remit their medical dues for the coming year at once.

Yours very truly,  
G. C. Stuart, Secretary-Treasurer.

Whereas, Providence has removed from our midst our esteemed and beloved friend, Dr. Charles E. Rowe, an honored member of the Houghton County Medical Society, and member of the Michigan State Medical Society and the American Medical Association, be it

Resolved, That we, the members of the Houghton County Medical Society, extend our deepest sympathy and sorrow to the bereaved family; and be it further

Resolved, That a copy of these resolutions be forwarded to the immediate family, and be it further

Resolved, That these resolutions be spread upon

the minutes of the Society, and a copy forwarded to the Michigan State Medical Society for publication.

(Signed)

A. D. Aldrich,  
A. F. Fischer,  
T. P. Wickliffe.

## KALAMAZOO COUNTY

The annual meeting of the Kalamazoo Academy of Medicine was held Tuesday, December, 1925. The clinics held in the forenoon at Old Borgess Hospital were well attended. The regular business session, election of officers, presidents address and address by Dr. Phillip Hadley took place in the afternoon at the Academy rooms. In the evening members of the Society and friends were guests of the Upjohn Company for dinner, following which was an address of welcome by Mr. Harold Upjohn and addresses by Reverend J. W. Dunning and Dr. Irving S. Cutter.

At the regular business session the Academy approved of the secretary's report as printed in the Bulletin and of the treasurer's report as printed in the Bulletin and amplified by the treasurer. Reports of other committees were approved as printed in the Bulletin.

Dr. Jackson, in behalf of the State Society, urged all members who possibly could to attend the district conference at Battle Creek. He also requested them to vote on the referendum stating their desires as to the future program for the State Society meetings. Drs. Crum, C. A. Youngs and Rogers were appointed by the chair as tellers for the election of officers. Two ballots were taken, Dr. Rush McNair leading on both ballots, others were scattered. Motion was made and carried that the three leading candidates be considered nominees. Motion was made by Dr. Rogers, one of the three leading candidates, that his name be withdrawn and that Dr. McNair be unanimously elected president of the Society. Carried.

A report of the nominating committee was then read. Followed by a motion which was carried that the secretary cast a ballot unanimously electing the members presented by the nominating committee to office. The following were elected to office for the ensuing year:

President, Rush McNair; first vice president, O. D. Hudnutt; second vice president, W. P. Bope; third vice president, C. A. Youngs; treasurer, Don C. Rockwell; librarian, R. J. Hubbell; censors, L. H. Stewart, W. G. Hoebeke; delegates to the State Society, L. J. Crum, W. E. Collins, C. E. Boys; alternates, A. E. West, W. R. Vaughn, H. F. Becker.

## MINUTES OF SPECIAL MEETING

At a special meeting of the Kalamazoo Academy of Medicine, called by the president, December 30, 1925, Dr. Sage was called upon and gave as the object of the meeting the desire to take suitable action relative to the death of Dr. Thomas George Britton. He gave a brief review of Dr. Britton's illness and called attention to the loss of one of our prominent members.

Following Dr. Sage's statement of the object of the meeting, motion was made by Dr. Light that the president appoint a committee to draw up suitable resolutions to be presented at the next regular



meeting of the Society. Drs. Welsh, Sage and Jackson were appointed on the committee.

The president also appointed a floral committee consisting of Dr. Eaton and Dr. Shackleton. A motion was also made by Dr. Eaton that the members of the Academy meet in the Academy rooms at 10:15, January 2, to attend Dr. Britton's funeral in a body.

The secretary was instructed to notify members of the society of the action taken at this meeting.

Adjourned.

### OCEANA COUNTY

At the regular meeting of the Oceana County Medical Society Dec. 3, the following officers were elected for the coming year:

President, L. P. Munger, Hart; vice president, J. D. Buskirk, Shelby; secretary-treasurer, Clinton Day, Hart; delegate to state convention, J. H. Nicholson, Hart, alternate, A. R. Hayton, Shelby.

After transacting other business the "Minimal Program" as outlined by the State Society for the County Medical Societies, was discussed, and motion made to carry out the program as far as in our province, to do so, was carried.

December 17, at the annual meeting of the Oceana County Medical Society held at the home of Dr. W. L. Griffin, the retiring president, a bountiful 7 o'clock dinner was served, to which the wives of the members were invited.

After a short business program the evening was spent in social and musical entertainment.

Clinton Day, Secretary.

### BAY COUNTY

The Annual Meeting of the Bay County Medical Society was held at the Wenonah hotel, December 14. The meeting was a memorial to the late president of the society, Dr. C. A. Traphagen. The vacancy in the office of president, occasioned by the death of Dr. Traphagen, was never filled.

After the reading of the annual reports Dr. J. W. Hauxhurst gave a short talk on Dr. Traphagen as he had known him.

The annual banquet with 45 members present, was followed by the following election of officers for 1926:

President, Dr. V. H. Dumond, Bay City; vice president, Dr. David Smith, Omer; secretary-treasurer, Dr. L. Fernald Foster, Bay City; Medico-Legal Committee, Dr. A. W. Herrick; delegates to Annual Meeting, Dr. Mary Williams, Dr. C. A. Stewart; alternates to Annual Meeting, Dr. L. F. Foster, Dr. G. M. Brown.

### MUSKEGON COUNTY

The regular meeting of the Muskegon County Medical Society was held the evening of Jan. 15, at the home of Dr. E. S. Thornton at Interlaken, with 29 members, and four visiting physicians present. The president, Dr. Thornton, dispensed with the regular order of business and gave the evening to Dr. Richard Smith of Grand Rapids. Dr. Smith spoke on goiter, giving his classification and covering symptoms, and treatment of each type, illustrating his talk with lantern slides. The subject was discussed by Drs. Wilson, Garber, Marshall, Busard, Closz, and Mandeville. Dr. Smith closed the discussion.

The meeting was followed by a very tasty luncheon and smoker. Dr. Smith promised to come again.

P. S. Wilson, Secretary.

### SANILAC COUNTY

The twenty-fourth Annual Meeting of the Sanilac County Medical Society was held in the court house at Sandusky December 18, 1925 at 2 p. m.

The following officers were elected for the following year:

D. D. McNaughton, president; N. J. McCall, vice president; S. M. Tweedie, secretary-treasurer; John Campbell, delegate to state convention; G. S. Tweedie, alternate to state convention; C. G. Robertson, Medical-Legal.

There being no further business the meeting was adjourned.

S. M. Tweedie, Secretary-treasurer.

### CHIPPEWA-LUCE-MACKINAW CO.

At the annual meeting of the Chippewa-Luce-Mackinaw County Medical Society held in Sault Ste. Marie, Dec. 4, 1925, the following officers were elected for 1926:

President, Dr. Geo. A. Conrad; vice president, Dr. F. H. Husband; secretary-treasurer, Dr. F. C. Bandy; delegate to state meeting, Dr. E. H. Webster; alternate, Dr. R. Bennett.

The members all indorse the minimum program, and all pledged their support in carrying out the program.

F. C. Bandy, Secretary.

### GRATIOT-ISABELLA-CLARE CO.

The Gratiot-Isabella-Clare County Medical Society met in the Alma city hall Thursday, Dec. 30, and elected the following officers for 1926: President, F. J. Graham, Alma; vice president, H. F. Kilborn, Ithaca; secretary-treasurer, E. M. Highfield, Alma.

There was considerable discussion of the minimum program, but no action was taken. The general feeling being that we were spread out too far to carry out such a program.

E. M. Highfield, Secretary.

### LENAWEE COUNTY

The annual Election of officers for Lenawee county was held in Adrian January 15, 1926.

The following officers were elected, President: H. H. Hammel, M. D., Tecumseh; vice president, S. J. Rubley, M. D., Britton; secretary-treasurer, R. T. B. Marsh, M. D., Tecumseh; delegate to state society, A. B. Hewes, M. D., Adrian; alternate delegate, A. W. Chase, M. D., Adrian.

R. T. B. Marsh, Secretary

### MIDLAND COUNTY

Dear Doctor:

The Midland County Medical Society held a meeting on January 18, 1926. Officers for year 1926 are for president: Gus Sjolander, Midland, Mich; secretary, E. J. Dougher, Midland, Mich.

Fraternally,  
E. J. DOUGHER.

## Among the Books

### *A Review and Frank Appraisal of Medical Books That are Proffered to the Profession by Publishers.*

**THE SURGERY OF PULMONARY TUBERCULOSIS:** John Alexander, B. S., M. D.—Assistant Professor of surgery U. of M. Introduction by Hugh Cabot, M.D. Lea and Febiger Company.

Our best review is Dr. Cabot's introduction:

No country in the world has attacked the general problem of tuberculosis of the lung more vigorously and I believe more intelligently than America. The attack has been made both through professional endeavor and popular education and very important improvement has been obtained.

The surgery of tuberculosis in fields other than that of the lung has been extensively developed and is, I believe, at least abreast of the results obtained anywhere. Under these conditions it is rather extraordinary that we should have been so notoriously backward in doing pioneer work in the surgery of pulmonary tuberculosis. In fact, however, the surgical measures which have been put forward as of value have almost without exception come from abroad. For more than a generation operative surgery in this field has been developing chiefly on the Continent, yet very little attention has been paid to it in this country. The evidence collected by Dr. Alexander of the number of surgeons working in this field and their reported cases shows a very respectable total for Continental surgeons, but a very meager total for American surgeons.

In general, we rather fancy ourselves as operating surgeons. We have extended and diversified our knowledge in the field of anesthesia which is one of the important problems in connection with the surgery of the chest. We have the technical facilities to deal with the questions here raised. But in spite of these advantages, our attack upon the problem has lacked force. With outstanding exceptions, the American surgeon has turned a deaf ear to the appeals of this problem and our extraordinarily small contribution is, to put it mildly, not flattering. Whatever may be the cause, there is little remaining excuse.

In this volume has been put in available form nearly the whole knowledge of the subject. No longer can we dodge the issue. The data sufficient to the forming of sound preliminary judgements are here spread before us. Dr. Alexander has not entered the field as an advocate of some pet method of his own but has quite dispassionately set forth the facts. He has given us ample detail in technical matters so that we need not fall into the pitfalls of the past. It appears that even at this stage of its development over sixty per cent of the patients upon whom radical surgery has been attempted for the amelioration of pulmonary tuberculosis are importantly better off. Unless this field is very different from other fields of surgical endeavor, we may expect still better results to follow.

After carefully reading his manuscript I cannot avoid the conclusion that we in America have neglected a great field in which surgery may alleviate suffering and bring hope. It behooves us to take this contribution of Dr. Alexander's seriously; to make use of the labors of our Continental colleagues and to bring to this problem all that we have to offer of skill and dexterity. We shall not lack in co-operation from our brethren in the field

of physio-therapy but we must be willing to share with them the risks and disappointments.

I believe this book will give great impetus to the surgery of the tuberculous lung.

Hugh Cabot.

**LECTURES ON HEREDITY:** A series of lectures given at the Mayo Foundation and the Universities of Wisconsin, Minnesota, Nebraska, Iowa, and Washington (St. Louis), 1923-24. 12 mo., 250 pages, illustrated. Cloth, \$2.50 net. W. B. Saunders Company, Philadelphia and London.

**LECTURES ON NUTRITION:** A series of lectures given at the Mayo Foundation and the Universities of Wisconsin, Minnesota, Nebraska, Iowa, and Washington (St. Louis), 1924-25. 12 mo., 243 pages, illustrated. Cloth, \$2.50 net. W. B. Saunders Company, Philadelphia and London.

**MEDICAL CLINICS OF NORTH AMERICA,** (Issued serially, one number every other month). Volume IX, Number IV, Tuane University Number, January, 1926, \$16 net. W. B. Saunders Company, Philadelphia and year, (July, 1925 to May, 1926), Paper, \$12; Cloth Octavo of 381 pages, with 49 illustrations. Per clinic London.

Received.

**ABDOMINAL OPERATIONS:** Sir Berkeley Moynihan, K.C.M.G., C. B., Leeds, London, England. Fourth edition, entirely reset and enlarged. Two octavo volumes totaling 1,217 pages, with 470 illustrations, 10 in colors. Cloth, \$20 net. W. B. Saunders Company, Philadelphia and London.

It is exactly twenty years since the first edition of this text was published. During these years surgeons have turned to it for guidance that was ever helpful. The text is presented in this fourth edition in a manner that imparts the ripened experience of the author, hence greater value attaches. No surgeon can afford to continue his surgery until he freely consults this text written by a world's master surgeon.

It has been ten years since the appearance of the last edition of this work. During this time many advances have been made in abdominal surgery. Sir Berkeley, active in the war service, and observing the great changes taking place in technic, in the refinements of standard operations, in sterilization and in after-care, decided to give his work a drastic revision. He did—virtually rewriting the work, necessitating its resetting from cover to cover. Obsolete methods were eliminated, a great deal of new material was added, many new illustrations were included. It is truly a brand new work and a magnificent summary of present-day surgical methods.

Several new chapters have been added, among them being those on Hypertrophic Stenosis of the Pylorus, Disappointments After Gastro-enterostomy, Dilatation of the Duodenum, Carcinoma of the Rectum, Preliminary Observations upon Cholelithiasis, Secondary Operations on the Biliary System, and a very important one on Surgical Technic. Sir Berkeley is particularly thorough and scrupulously careful in describing technic, believing to operative skill more than to any other factor is due the success of an operation. Throughout the book, therefore, he teaches great respect for the principles of technic and their application.

Sir Berkeley's wide experience with a great wealth of material, both in a large private practice and during his active service in the war, combined with his international reputation as a surgeon of unusual skill, make this edition of Abdominal Surgery a most desirable addition to the library of every surgeon in active practice.

**ULTRA-VIOLET RAYS IN THE TREATMENT AND CURE OF DISEASE:** Percy Hall—London. Price \$3.75. C. V. Mosley Company, St. Louis, Mo.

An acceptable guiding manual.